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ABSTRACT

This survey is limited to the status of teacher education in Asia only as it pertains to the training of primary and general secondary school teachers. The programs of 19 countries are reviewed. Attention is given to policies of admission and enrollment, student aid, facilities, curriculum, qualifications of educators, in-service education, and research. A selected bibliography is included. (JA)

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University of the Philippines, Quezon City

TEACHER EDUCATION IN ASIA

A regional survey

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INTRODUCTION

Objectives and scope of the survey

The Regional Survey of Teacher Education in Asia attempts to describe the status of teacher education for schools at the first and second levels of education in the Member States in Asia around 1970. The Survey is limited to the training of primary and general secondary school teachers only; the training of teacher educators and teachers for the vocational, technical and other diversified streams in secondary education, or teachers of agriculture, trade, industrial and engineering schools at the second level is not included in the present Survey.

The Survey was initiated in 1970 to assemble data in preparation for the Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia which was convened by Unesco at Singapore from 31 May to 7 June 1971. The Survey therefore covers only those countries in the area of service of the Unesco Regional Office for Education in Asia, which were Member States at the time it was initiated, and which participated in the Conference, namely, Afghanistan, Burma, Ceylon, the Republic of China, India, Indonesia, Iran, the Khmer Republic [1], the Republic of Korea, Japan, Laos, Malaysia, Mongolia, Nepal, Pakistan, the Philippines, Singapore, Thailand and the Republic of Viet-Nam.

The overall regional review which appears as Part I is in the main concerned with the Member States participating in the Karachi Plan (see page 7); data on Japan are adduced, whenever available, for comparative purposes.

Definition of terms

In this Survey, the first level of education is considered to be that which is given in 'primary' or 'elementary' schools, beginning with Grade I, for a period of at least four years. Nursery and kindergarten schools have been treated as institutions for education preceding the first level and are not taken into account here.

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1. Then known as Cambodia.

Survey of teacher education

Education at the second level is considered to be that which is based upon at least four years of previous schooling, and which provides general or specialized instruction, or both; middle schools, secondary or high schools, vocational schools and teacher training schools at this level belong to this category.

Education at the third level, as referred-to in the survey is that which requires as a minimum condition of admission the successful completion of education at the second level, or evidence of the attainment of an equivalent level of knowledge. Education at the universities, teachers' colleges and higher professional schools are included in third-level education.

'Primary teacher training' qualifies its recipients to teach classes which comprise the first level in the school system. They are trained in institutions at the second or third level. 'Secondary teacher training' qualifies a teacher to teach the next higher grades of the school. In some of the Member States the term 'general secondary teacher training' is used to denote the training of teachers who could ordinarily teach in only the lower grades of the second level, known differently as the upper primary, lower secondary, junior high or middle stage of the school system; this training, like primary teacher training, is given in institutions at either the second or third level. Teachers for the upper secondary classes in these countries are generally trained at the third level. In countries where there are no upper secondary grades in the schools, teachers for the high school grades, usually grades VIII or IX to X, are trained in third-level institutions, which may be independent training colleges or departments of universities.

Sources

The Survey was carried out by means of a comprehensive questionnaire. The information obtained from the responses was supplemented by data drawn from other sources, such as Unesco publications and national and institutional publications.

The texts of the national chapters appearing in Part II of the Survey were sent to the Member States concerned, for their comments and suggestions. Grateful acknowledgement is made to the Ministries of Education and National Commissions for Unesco from whom replies were received.

PART I

BACKGROUND

In the decades of the 1950s and 1960s, national endeavours in education were focussed primarily on expanding educational opportunities at the first level of education. For the region as a whole, the average annual rate of increase in enrolment at the first level, which was 4.8 during the period 1950-55, rose to 5.9 in 1955-60 and 6.6 in 1960-65. A variety of new factors - social, economic and political - provided the driving force for this expansion, and found expression in the plan (since known as the Karachi Plan)[1] which the representatives of Asian Member States adopted in their meeting at Karachi in December 1959-January 1960.

The training and supply of teachers was recognized in the Karachi Plan as a critical factor in realizing the targets of the Plan. It was estimated in the Plan that the enrolments in teacher training institutions would have to increase from 280,000 in 1958 to 742,000 in 1960; 1,085,000 in 1965; 1,435,000 in 1970; and 2,131,000 in 1980. Tables 1 and 2 on pages 8 and 9 show the size of the training systems (number of institutions) and the composition of the teaching force in terms of training qualifications for the countries which participated in the Karachi Meeting.

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1. Unesco. *The needs of Asia in primary education; a plan for the provision of compulsory education in the region.* Paris, 1961. (Educational Studies and Documents, No. 41)

Table 1. Number of institutions for primary teacher training and the student-teacher ratios 1958-59

Country	Number of institutions	Student-teacher ratios
Afghanistan	3	1:16
Burma	6	1:22
Cambodia[1]	2	1:31
Ceylon	22	1:16
India	916 (1956-57)	1:12
Indonesia	755	1:11
Iran	4	1:9
Korea, Rep. of	18	1:27
Laos	1	1:17
Malaya[2]	15	1:29
Nepal	1 (with 11 mobile teams)	1:18
Pakistan	94	1:18
Philippines	305	1:11
Thailand	29	1:16
Viet-Nam, Rep. of	1 (also 9 normal school classes)	1:15

Source: Unesco. Regional Meeting of Representatives of Asian Member States on Primary Education. Supporting document to the working paper, (Karachi, 28 December 1959 - 9 January 1960). p. 31.

1. Now known as the Khmer Republic.
2. Now known as West Malaysia.

Table 2. Trained and untrained primary teachers 1958-59

Country	No. of teachers	No. of trained teachers	%
Afghanistan	3 220	2 250	70
Burma	34 431	23 946	70
Cambodia[1]	13 247	...	...
Ceylon	61 935	43 330	70
India	710 139	442 147	62
Indonesia	176 653	135 175	78
Iran	37 638	10 239	27
Korea, Rep. of	61 045	60 645	100

Table 2. Trained and untrained primary teachers 1958-59 (cont'd)

Country	No. of teachers	No. of trained teachers	%
Laos	3 083	...	...
Malaya [2]	36 509	19 095	52
Nepal	4 500	1 700	38
Pakistan	111 900	80 424	72
Philippines	99 256	91 633	96
Thailand	93 602	37 050	43
Viet-Nam, Rep. of	...	...	...

Source: Unesco. Regional Meeting of Representatives of Asian Member States on Primary Education. Supporting document to the working paper, (Karachi, 28 December 1959 - 9 January 1960). p. 31.

1. Now known as the Khmer Republic.
2. Now known as West Malaysia.

The definition of 'trained teacher' is of course different in different countries. The requirements of basic schooling as well as the duration of professional training also vary from country to country. By way of 'benchmark', Table 3 sets out the requirements reported to be in force around 1958-1959.

Table 3. General education and professional training of primary teachers 1958-59

Country	Minimum requirements in general education: years of schooling	Duration of the training course
Afghanistan	9 years	3 years
Burma	7 years	1 year
Cambodia [1]	6 years	4 years
Ceylon	10 years	2 years

Table 3. General education and professional training of primary teachers 1958-59 (cont'd)

Country	Minimum requirements in general education: years of schooling	Duration of the training course
India	10 or 11 years (This was lowered to a completion of the middle school course (7 or 8 years) in rural areas and in the case of women teachers).	2 years in some areas and 1 year in others.
Indonesia	6 years.	There were two types of training institutions - the first provided a 4-year course and the second a 6-year course which was equivalent to the 3 years of the lower secondary school and 3 years of teacher training proper.
Iran	12 years (or completion of class 9 with training).	2 years (1 year for tribal schools).
Korea, Rep. of	9 years (It was proposed to raise it to 12 years of study with effect from 1960).	3 years. (To be reduced to 2 years when the minimum requirement was raised to 12 years of study).
Laos	6 years (Even this was lowered in some cases).	4 years.
Malaya[2]	i) 11 years. ii) 9 years.	2 years. 3 years.
Nepal	10 years (This was lowered to completion of middle school in rural areas. In hilly tracts, even lower qualifications were accepted).	1 year.

Table 3. General education and professional training of primary teachers 1958-59 (cont'd)

Country	Minimum requirements in general education: years of schooling	Duration of the training course
Pakistan	10 years (lowered where necessary, and particularly in rural areas, to 7 or 8 years of school).	2 years in some cases and 1 year in others.
Philippines	10 years.	2-4 years.
Thailand	10 years.	2 years.
Viet-Nam, Rep. of	10 years.	1 year.

Source: Derived from: Unesco. Regional Meeting of Representatives of Asian Member States on Primary Education. Supporting document to the working paper, Karachi, 28 December 1959 - 9 January 1960. p.27.

1. Now known as the Khmer Republic.
2. Now known as West Malaysia.

The pressure for expansion which centred on first-level education in the 1950s manifested itself at the second level during the 1960s. By around 1965 a shift in the educational effort toward secondary and higher education was clearly marked. Though both general secondary and vocational secondary education showed high rates of growth, enrolments in general secondary accounted for by far the largest proportion of the total enrolment. The rate of enrolment increase in teacher training institutions (at the second level) was relatively low. A part of the explanation is that, in some countries of the region, second-level teacher training was moved up to the third level. Even taking this into account, however, it appears that expansion of training facilities did not keep pace with enrolment increases. The growth of teaching staff at the second level and their distribution by type of education are shown in Table 4.

Table 4. Teaching staff at the second level by type of education, Asian region, 1950-51 (in thousands)

Year	Total Second level	General	Vocational	Teacher training
1950	342	316	18.2	8.3
1955	542	493	30.9	17.4
1960	932	858	57.0	16.7
1965	1 289	1194	72.3	22.0

Source: Unesco Regional Office for Education in Asia. Progress of education in the Asian region: a statistical review, Bangkok, 1969.

PART II

TEACHER EDUCATION AROUND 1970

By 1970, almost all countries of the region had developed their teacher systems to cover preparation of teachers at all levels of school education. Tables 5, 6 and 7 give information about the national training systems in terms of four characteristics: the basic regional length of schooling; the duration of teacher training; the levels of school education for which teachers are prepared and the type of institution where training takes place; and whether the training is organized concurrently or consecutively with academic preparation.

Table 5. Required length of previous schooling and duration of teacher training courses (in years)

Country	Primary teacher training		Primary, general secondary teacher training		Upper secondary teacher training	
	Previous schooling	Duration of course	Previous schooling	Duration of course	Previous schooling	Duration of course
Afghanistan	12	1	12	2	12	4
Burma	10	1	11	1	11	5
Ceylon	10[1]	1	10[2]	1	10	4
					14	1
China, Rep. of	9	5	9	5	12	5
India	10 or 11	2	10 or 11	2	10 or 11	4
					14 or 15	1
Indonesia	9	3	12	3	12	5
Iran	12	1	12	2	12	4
	9	2[3]				

Table 5. Required length of previous schooling and duration of teacher training courses (in years) (cont'd)

Country	Primary teacher training		Primary, general secondary teacher training		Upper secondary teacher training	
	Previous schooling	Duration of course	Previous schooling	Duration of course	Previous schooling	Duration of course
Khmer Republic	12	1	13	1		
Korea, Rep. of	12	2	12	4	12	4
Laos	6	4	10	5	15	3
Malaysia	6 11	2[4] 2	11	2	13 16	4 1
Mongolia	7-8	3-4			10-11	4-5
Nepal[5]	8	1	10	2	12	2
Pakistan	10	2	12	1	14	1
Philippines	10	4	10	4	10	4
Singapore	10	2	12	2	15	1
Thailand	10	2	12	2	12	4
Viet-Nam, Rep. of	11 7	2 2[6]	13	1	13	3
Japan	12	2-4	12	2-4	12	4

Source. Questionnaire returns and reports received.

1. G.C.E. '0' Level.
2. G.C.E. 'A' Level
3. Elementary school teachers for rural areas and tribal schools.
4. These are accelerated training courses.
5. The New Education Plan for Nepal has fixed the minimum requirement for entrance to Primary School Teachers' Training Centres as 10 years of schooling. This is expected to be implemented from 1972.
6. Teachers of mountain areas only.

Table 6. Number of training institutions and levels of training (around 1970)

Country	Year	Number	Type of institution	Levels of training: Primary	Lower secondary	Upper secondary
Afghanistan	1970	8	DMA's Institute for Teacher Training	✓		
		3	Higher Teachers' Colleges		✓	
		1	University Faculty of Education			✓
Burma	1970	11	Teacher Training Institute	✓		
		3	State Teachers' Colleges		✓	
		1	Institute of Education			✓
Ceylon	1970	22	Non-specialist Teachers' Colleges	✓		
		3	Specialist Teachers' Colleges		✓	
		4	University Departments			✓
China, Rep. of	1970	9	Junior Teachers' Colleges	✓	✓	
		2	Teachers' Colleges			✓
		1	University Department			✓
India	1970	1 228	Teacher Training Schools and Institutes	✓		
		303	Teachers' Colleges			✓
		32	University Departments			✓
Indonesia	1968	347	SPG's [1]	✓		
		11	IKIP's [2] (with 5 branches)		✓	✓
Iran	1970	1	University College of Education	✓		
		20	1 year Teacher Training Centres	✓		
		3	Nomadic Teachers' Colleges	✓		
		17	Rural Teachers' Colleges	✓		
		69	Primary Teachers' Colleges	✓		
		1	Teacher Training College of Army of Knowledge	✓		
		2	Teacher Training for Vocational Institutions		✓	

Table 6. Number of training institutions and levels of training (around 1970) (cont'd)

Country	Year	Number	Type of institution	Levels of training: Primary	Lower secondary	Upper secondary
Iran (cont'd)	1970	11	Teacher Training Colleges for Guidance		✓	
		5	Higher Teachers' Colleges			✓
		8	University Departments			✓
Khmer Republic	1970	3	Primary Training Institutes	✓		
		1	Ecole Normale Supérieure		✓	
Korea, Rep. of	1970	16	Junior Teachers' Colleges	✓		
		13	Teachers' Colleges			✓
		100	University Departments			✓
Laos	1970	4	4-year Normal Schools	✓		
		4	2-year Training Centres	✓		
		1	Ecole Supérieure de Pédagogie		✓	
Malaysia	1970	9	Training Colleges	✓		
		1	Emergency Training Centre	✓		
		7	Teachers' Colleges		✓	
		1	University Faculty of Education			✓
		1	School of Science and Centre for Educational Studies			✓
Mongolia	1970	6	Teacher Training Tekhnikums	✓		
		1	Pedagogical Institute			✓
		1	State University			✓
Nepal	1970	5	Primary Teacher Training Centres	✓		
		1	Inter: Education College		✓	
		1	University Department		✓	✓
Pakistan	1970	77	Teacher Training Schools	✓		
		17	Teacher Training Schools	✓		
		6	Training Schools		✓	
		4	Colleges			✓
		11	Teachers' Colleges			✓
		2	University Departments			✓

Table 6. Number of training institutions and levels of training (around 1970) (cont'd)

Country	Year	Number	Type of institution	Levels of training: Primary	Lower secondary	Upper secondary
Philippines	1970	281	Departments of Private Universities and Colleges	✓		
		9	Normal Schools or State Teachers' Colleges	✓		
		333	Secondary Training Colleges or (University Departments)	✓		✓
Singapore	1970	1	Teachers' College	✓	✓	✓
Thailand	1970	4	Teacher Training Schools	✓		
		21	Teachers' Colleges	✓	✓	
		1	College of Education with 7 branches and University Faculties of Education	✓	✓	✓
Viet-Nam, Rep. of	1970	8	Normal Colleges	✓		
		6	Normal Classes (Incomplete Colleges)	✓		
		6	Faculties of Pedagogy in Universities			✓
Japan	1970	47	Teacher Training Institutes	✓		✓
		764	Junior Colleges and Universities	✓		✓

Source: Questionnaire returns and reports received.

1. SPG: Sekolah Pendidikan Guru - Teacher training schools at the second level for training primary school teachers.

2. IKIP: Institut Keguruan dan Ilmu Pendidikan - Teacher training (bachelor's degree) colleges at the third level for training junior secondary school teachers.

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In the main, there are two patterns of teacher training for second level existing in the region: one in which professional training and general education are given concurrently and spread over three or four years leading to a degree, and the other in which one year's professional training is given after a degree in the academic course has been taken. The general trend is increasingly towards adopting the former pattern, which enables the academic education of the prospective teacher to be related more closely to his professional education and future work and gives him a longer period for professional orientation.

The situation in the countries of the region regarding the patterns now in operation may be seen in Table 7. Details concerning each country are summarized in subsequent pages.

Table 7. Concurrent and consecutive courses in teacher training, Asian countries

Country	Primary teacher training		Secondary teacher training	
	Concurrent	Consecutive	Concurrent	Consecutive
Afghanistan	✓	✓	✓	✓
Burma		✓	✓	✓
China, Rep. of	✓	✓	✓	
India		✓	✓	✓
Indonesia	✓		✓	
Iran		✓	✓	✓
Khmer Rep.		✓		✓
Korea, Rep. of		✓	✓	
Laos	✓		✓	
Malaysia		✓	✓	✓
Mongolia	✓		✓	✓
Nepal		✓	✓	✓
Pakistan		✓		✓

Table 7. Concurrent and consecutive courses in teacher training, Asian countries (cont'd)

Country	Primary teacher training		Secondary teacher training	
	Concurrent	Consecutive	Concurrent	Consecutive
Philippines	✓		✓	
Singapore		✓		✓
Thailand	✓		✓	
Viet-Nam, Rep. of		✓	✓	

Afghanistan - A concurrent course for primary level teaching continues in the lycees grades X, XI and XII, but this is being terminated. There is a grade XIII, organized separately, which is consecutive. For second-level teaching, the university offers a four-year concurrent course, and the Higher Teachers' College offers a consecutive course of two years to those who have twelve years at the lycees. Graduates of H.T.C. normally can teach only the lower levels of the secondary school, although many of them teach lycee grades also.

Burma - Primary teacher training is a consecutive course of one year in Teacher Training Schools for 10-year school leavers. For secondary teacher training (middle-school level) a consecutive course of one year is given for matriculates (those with 11 years of schooling) in the Teachers' Colleges. The university offers a five-year concurrent course to matriculates, and a one-year Diploma course for university graduates which is consecutive and which can be done by correspondence in two years.

China, Rep. of - Junior colleges offer a concurrent course of five years to junior high school graduates (with 9 years of study) and a consecutive course of two years to senior high school

China, Rep. of (cont'd)		graduates who are admitted in the fourth year for teaching at primary- and middle-school levels. For secondary teaching, the university offers a concurrent course of five years to 12-year school leavers.
India	-	Primary teacher training is a two-year consecutive course for 10- or 11-year school leavers. Regional Colleges of Education offer a four-year concurrent teacher education course for 11-year school graduates, and Teachers Colleges offer a one-year consecutive course to university graduates (14 years of previous study) for second-level teaching.
Indonesia	-	The SPG admits 9-year graduates to a second-level training course of three years for primary-level teaching. Graduates of this course are entitled to enter the IKIP university-level institution which prepares for a Bachelor's degree for second-level teaching after three years of study or a Master's degree after five years. Hence both are concurrent courses.
Iran	-	Primary teacher training is a consecutive course of one year for 12-year school leavers or two years for less qualified candidates. Training of Guidance teachers is two-year consecutive course for holders of baccalaureat qualification; the four year courses in the H.T.C. for the licentiate degree and in the University for a B. Ed. degree are concurrent. The College of Education offers a one-year consecutive course for degree holders to become schoolmasters at the first or second level.
Khmer Republic	-	12-year schooling is followed by one-year training for primary teaching; while 13-year schooling is followed by one-year training for teaching the first cycle of secondary education. Both are consecutive courses.

Korea, Rep. of - Primary teacher educators are trained in two-year Junior Colleges after 12 years of school - a consecutive course. But secondary school teachers are trained in four-year concurrent courses in the Universities.

Laos - Primary teacher training is concurrent, being four years or two years of training at the second level to those who have completed 6 years of primary school. Teachers for lower secondary education have three additional years of training, and those for the second cycle of secondary a further two, plus one year of internship.

Malaysia - Primary and secondary teacher training in the Teacher Training Colleges is consecutive: two years after 11 years of school; so also is the one-year post-graduate Diploma Course in Education in the University for teaching secondary grades. The four-year B. Sc. with Education Course in Science Teaching, at Penang, is a concurrent course.

Mongolia - The courses offered in the Teacher Training Tekhnikums are concurrent with second-level education, in a three-year course they train candidates with 7 or 8 years of study for primary school teaching. The Pedagogical Institute offers a consecutive course for teaching the lower grades of the second level to those who had already qualified for primary teaching. The Pedagogical Institute and the University offer concurrent courses to 10-year high school grades, of four or five years' duration for teaching higher grades of secondary school.

Nepal - A consecutive course of one year is provided for those who have at least 8 years of schooling for primary school teaching and two years for those with lower qualifications. A concurrent course of four years is offered for those with 10 years of schooling, as well as a consecutive course of one year for university graduates (14 years of study) trained for second level teaching.

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Pakistan	-	A two-year training for general primary school teaching is offered to 10-year school leavers, and a one-year B.Ed. course is held for university graduates (14 years of schooling). Both are consecutive courses.
Philippines	-	Four-year concurrent courses for 10-year school leavers are organized for both primary and secondary teaching.
Singapore	-	Primary teacher training, teacher training for the lower secondary grades and a Diploma Course for teaching upper secondary grades are all consecutive: two years for 10-year school leavers for primary, two years for 12-year school leavers for lower secondary and one-year for university graduates (15 years of study) for the Diploma.
Thailand	-	Admitting 10-year school leavers, a two-year programme for primary teacher training, followed by a two-year programme for lower secondary teacher training and a further two-year programme for high school teaching are provided - all concurrent courses.
Viet-Nam, Rep. of	-	For primary school teachers, a two-year consecutive course is offered in Normal Colleges taking 11-year school leavers in urban areas, and taking 7-year school leavers in rural areas for secondary teacher training. For training teachers of the first cycle of secondary education, a one-year course is offered in the Faculty of Education to those who have 13 years schooling; for training teachers of the second cycle of secondary school, the course is of three years' duration. This and the training of secondary teachers in the university are concurrent.

In a region as vast as Asia, the pace and stages of development must necessarily vary from country to country. It is however possible to discern certain directions which their development efforts seem to have in common. There is an

identifiable trend towards lengthening the required basic period of schooling that precedes entry into a professional teacher training course. The shortened period of schooling is usually an exception employed to meet exceptional needs - for example, increasing the supply of teachers in remote rural areas. Second, in an earlier period, there was a tendency to create different types of teacher training institutions for different levels, and even stages of school education. While this continues to be the characteristic of training systems in some countries, the overall trend now seems to be towards greater unification of the training systems, with institutions preparing teachers for more than one level. Third, there is a marked trend toward locating the training of teachers at a higher level. While Asian Model had assumed that a gradually increasing proportion of teachers would be trained in teacher training institutions at the third level, with a corresponding decline in the number of those trained at the second level, this shift is taking place much more rapidly than the rate assumed in the Asian Model. On the question of whether the training programme should be "concurrent" or "consecutive", no clear trends emerge. There are varying practices, even in the same country. One factor is the continuing influence of the model on which the training system of a country was originally based. Many countries, it will be noted, have both types of programme organizations.

Enrolment

Tables 8 and 9 show enrolments for primary and secondary teacher training. The data are derived from questionnaire returns but have to be read with some reservation because enrolments in different types of training programmes provided by the same institution are not always clearly demarcated.

Table 8. Enrolment in institutions for primary teacher training, Asian region

Country	Year	Enrolment
Afghanistan	1967	2 489
Burma	1970-71	38 111
Ceylon	1968	2 235
China, Rep. of	1967	6 731
India	1967	117 179

Table 8. Enrolment in institutions for primary teacher training, Asian region (cont'd)

Country	Year	Enrolment
Indonesia	1967	54 176
Iran	1969-70	6 481
Khmer Republic	1969-70	21 772
Korea, Rep. of	1969	10 492
Laos	1968-69	2 039
Malaysia	1969	1 365[1]
Mongolia	1969-70	573
Nepal	1969-70	1 050
Pakistan	1968-69	10 455[2]
Philippines	1967-68	129 668
Singapore	1969	1 338
Thailand	1970	50 510
Viet-Nam, Rep. of	1969-70	3 904

Source: Questionnaire returns and reports received.

1. Excluding approximately 440 students enrolled in East Malaysia.
2. Including lower secondary teacher training.

Table 9. Enrolment in institutions for secondary teacher training, Asian region

Country	Year	Lower secondary	Higher secondary
Afghanistan	...	...	...
Burma	1970-71	593[1]	2 721
Ceylon	1969	641	230
China, Rep. of	1967		13 741
India	1964-65		25 264[2]
Indonesia	1967		25 132
Iran	1969-70	...	...
Khmer Republic	1969-70	5 697	
Korea, Rep. of	1969		9 301
Laos	1968-69	198	
Malaysia	1969	1 262[3]	

Table 9. Enrolment in institutions for secondary teacher training, Asian region (cont'd)

Country	Year	Lower secondary	Higher secondary
Mongolia	1969-70		1 563
Nepal	1968		138
Pakistan	1968-69		4 864
Philippines	1967-68		59 640
Singapore	1969		459
Thailand	1970		35 231
Viet-Nam, Rep. of	...	...	...

Source: Questionnaire returns and reports received.

1. Enrolment in the second year of JAT only. The first-year course was abolished during 1970-71. In 1971-72, a new 1-year course has been launched to enrol 4,000 new students.
2. Students in 247 training institutes.
3. Excluding approximately 80 students in East Malaysia.

The size of training institutions varies over a wide range, with enrolments from as low as 100 to above 4,000. The number enrolled for institutional study varies all the way from below 100 to above 4,000 in institutions for primary teacher training in the region. In many States of India, and in Malaysia and Nepal, the number of trainees enrolled in institutions for primary teacher training is less than 300. Institutions for primary teacher training in Burma take approximately 400, while the figure in Ceylon varies between 100-600, and in Pakistan, between 200-500. Enrolments in training institutions in the Republic of China and the Republic of Korea vary between 300-1,000; and in the Philippines between 300-3,000. The Teachers' College in Singapore has a student strength of over 4,000 and includes all levels of training. In Thailand it varies between 300-1,800 in the different institutions for primary teacher training. The Institute of Education in Burma takes about 2,000 candidates for secondary teacher training. The institutions for secondary teacher training in the Republic of Korea

and Thailand admit up to 2,000, while those in the Republic of China and the Philippines admit up to 3,000.

The practice of admitting comparatively smaller numbers of trainees to the teacher training institutions in some countries, especially for teaching at the primary level, seems to have been determined by the number of classes available in the demonstration school or schools in the vicinity for practice teaching. The need for training more teachers to cope with the demand has gradually led to the evolution of larger institutions.

Admission procedures

The procedures for admission to institutions for primary teacher training in most of the Member States include selection tests and a medical examination as well as an interview for the candidates. The selection is generally made from students on the basis of their ranks in the qualifying examinations (e.g. the upper 50% of the 10th grade graduates in the Philippines). In Burma and the Republic of Korea, all candidates have to pass a State examination for qualifying to apply for admission to teacher training institutions. In Indonesia, after selection, a week is spent by the candidates as a period of probation, at the institutions where they seek admission. During this period they are observed by members of the faculty and ranked, and this order is followed for admission. From the students who attend the primary teacher training institutions, the best ones are selected at the end of the third year and directly admitted to the course for secondary teacher training (IKIP), while all others have to render two years of teaching service before they can be admitted to this second-level institution, for training.

The selection of candidates in most Member States for primary teacher training is also increasingly being regulated on the basis of the localities or regions to which they belong, as this is found to help retention.

Conditions for admission to secondary teacher training courses are almost the same where the entrance qualification is identical. In some of the Member States, however, a slightly higher achievement level in the qualifying examination is required, as for instance in Ceylon and Malaysia. In India and Pakistan, where secondary teacher training is a consecutive course of one year after graduation from the university, the

major criterion for selection is a pass in the degree examination in Arts or Science, although a competitive examination for selection - or selection on the basis of their rank in the university examination - may be used when there are more applicants than there are vacant places in any institution.

Student aid

Teacher education is free at the primary level in government institutions in all Member States except Singapore. In addition, to free tuition, monetary allowances for residence are available in some countries, and in some others, allowances for such items as books and clothing are given. For teachers in service, salaries or stipends may also be paid during the training period. In most of the Member States there is provision for awarding scholarships, generally conditional on given the trainees serving as teachers for a fixed number of years.[1]

Facilities

The expansion of teacher education institutions has not always been accompanied by the provision of adequate facilities. In most countries of the region, teacher training institutions, especially at the first level, suffer from want of adequate buildings, library facilities, laboratories and audio-visual aids. While this is the general picture, efforts are being made in some Member States to develop a few institutions as leading institutions and equip them adequately. Language laboratories, audio-visual centres, speech clinics, and well equipped shops for mechanical and electrical work training, have been installed, and experiments are in progress in using closed-circuit television.

The larger the intake of institutions, the better are the chances of their being provided with the space and amenities required. The Teachers' College in Singapore is an instance in point. The big Teachers' Colleges in the Republic of China,

1. Readers will find considerable data on the topics in this paragraph, as well as on such as requirements for admission (minimum qualifications) in: Pires, E.A. *The recruitment and selection of candidates for primary teacher training in Asia.* Bangkok, Unesco, 1968. 86 p.

the Republic of Korea, Philippines and Thailand are similarly well placed in their development.

Curriculum, student teaching and evaluation

The curriculum of primary teacher education in many of the Asian Member States is either prescribed or approved by the Ministry of Education and has to be followed by all institutions within the State; teacher educators are generally consulted in framing or revising the curriculum. This is the practice in Afghanistan, Burma, Ceylon, the Republic of China, India (at the State level), Indonesia, Iran, the Republic of Korea, Malaysia, Mongolia, Nepal, Pakistan, Singapore and Thailand. The curriculum is prepared by heads of institutions and approved by the Faculty of Education in the Khmer Republic, Laos and the Republic of Viet-Nam. In the Philippines, the broad areas of the curriculum, as prescribed by the Bureau of Public Schools have to be followed, but the institutions have a large degree of freedom in organizing the courses within the larger framework.

In the case of secondary teacher education where the institutions are affiliated to universities, the curriculum is prepared by the universities.

Generally the primary teacher education curriculum has three main components: general education, professional education and practice teaching. By and large, the primary teacher training course is one in which 'all subjects are for all', in the content and/or the theory subjects. In a few Member States, electives are being introduced. One or two subjects are normally required to be chosen for intensive exploration by the trainee on the basis of self-study. These major courses are called 'peak' courses in Japan. In the Philippines, they are known as 'concentration' courses. Subjects of specialization (electives) are usually from academic subject areas but in a few instances belong to a professional area. The professional education courses are made up of the fundamentals of educational theory grouped under different headings and include the elements of the foundation subjects, aesthetic and practical arts, community education, social education, and sometimes adult literacy, and teaching practice now broadened into student teaching. In some Member States, the methodology of teaching school subjects also figures among the professional subjects

while, in some others, it is included under general education along with the content subjects.

A few illustrative cases are given below to show the range of variations in curriculum organization:

Afghanistan - General studies; professional studies; background studies; practice teaching.

Burma - Educational theory and practice; practical subjects; methodology; practice teaching.

Ceylon - Core subjects; electives; school practice.

Indonesia - Courses to promote spirit of Panchasila; courses to promote basic knowledge; courses to promote specific knowledge, art and skill; practice teaching.

Khmer Republic - Professional education; practice teaching.

Nepal - Professional education; practice teaching.

Singapore - Professional education; practice teaching

Thailand - General courses; special courses; education courses; practice teaching.

Viet-Nam, Rep. of - General education; professional education; co-curricular activities; practice teaching.

The professional education part of the primary teacher education curriculum consists of the theory and practice of education. The theoretical subjects are labelled differently in the different Member States. The subject areas which are found, with some variation, in almost all countries in one form or another are the following:

1. Principles of education (appearing with such different titles as educational theory and practice (Burma); educational studies and practice (Republic of China); foundation of education (Republic of Korea). Interesting variations are to be found in Singapore where it is combined with educational psychology; in Ceylon where is combined with general methods, administration, organization and comparative education; and in

Thailand where it is combined with educational psychology, child development and teaching methods.

2. Educational psychology (with varying emphasis, from child development to guidance).
3. School organization, administration and supervision.
4. Teaching methods (both general methods as well as specific subject methods).
5. Aesthetic education.

Some traditional subjects such as history of education or philosophy of education are found in a few countries. In some countries, new subjects have been introduced: educational sociology (Republic of China); community development (Laos); educational problems (Republic of Viet-Nam); curriculum development (Nepal); audio-visual education (Republic of China, Republic of Korea, Singapore); educational research (Republic of Korea, Philippines); measurement and evaluation (Republic of China, Philippines); vocational education (Republic of Korea).

In an increasing number of countries in the region, teachers for second-level education are prepared in a unified programme which is not differentiated by stages within the second-level (lower or higher). In some countries, however, there are different levels of training - certificate level, diploma level and degree level. In the latter case, the curriculum at the certificate level has more the flavour of primary teacher training.

In most countries, the curriculum for the preparation of second-level teachers has four components: general education, professional education, specialization (in one or two subjects) and practice teaching.

The following broad subject areas in professional education are found, with some variation, most frequently in the countries;

1. Principles of education (with which may be combined general methods (Ceylon) or the philosophical, sociological and psychological foundations of education (India).

2. Educational psychology.
3. Educational administration and school organization.
4. Methods of teaching.

Less frequently but nonetheless significantly are to be found history of education and comparative education. The 'newer' subjects are gradually being introduced: educational sociology (Republic of China, Republic of Korea); guidance (Republic of China, India, Iran, Philippines, Republic of Korea); educational measurement and evaluation (Republic of China, India, Republic of Korea, Pakistan); educational research (Republic of China, India, Pakistan, Nepal, Philippines) and audio-visual education (Republic of China, India, Afghanistan, Singapore). There are other interesting beginnings in some countries; for example, introduction of educational planning and of curriculum development as subjects of study.

Balance in the curriculum

What proportion of instructional time is given to the various components in professional courses? Tables 10 and 11 show as order of magnitude the division of instructional time in primary and secondary teacher education between academic and professional and between theory and practice. The variations from one country to another are too wide to permit delineation of any common elements. The tables appear on pages 32 and 33.

Student teaching

Much of 'practice' or 'practical work' is centred on student teaching. Practices in organizing student teaching differ from country to country, but, in general, there are four phases in it. First is observation of classes, which is done in the attached practising school of the institution. The second is on-campus student teaching when the student-teacher gains experiences on the job of teaching under guidance and supervision of his instructors and by serving as teacher-aid. The third is off-campus student teaching in a co-operating school when he learns to take a larger measure of responsibility for organizing teaching-learning situations and learns, by participation, the other activities involved in student teaching. The fourth is a

Table 10. Balance of components in the curriculum of primary teacher education and in the preparation of the teacher

Country	Duration of schooling	Duration of training	Balance between academic and professional education in the teacher education curriculum		Balance between theory and practice in the professional curriculum	
			Academic	Professional	Theory	Practice
	Years		Percentages			
Afghanistan	12	1	25	75	36.7	63.3
China, Rep. of	9	5	86.5	19.5	57.1	42.9
India (represented by Kerala State)	10	2	51.4	48.6	82.4	17.6
Indonesia	9	3	63.3	36.7	86.4	13.6
Iran	12	1	58.3	41.7	53	47
Khmer Republic	12	1	31.3	68.7	70	30[1]
Korea, Rep. of	12	2	66.5	33.5	87.5	12.5
Laos	6	4	79.8	20.2	83.2	16.8
Malaysia	11	2	41.1	55.9	84.3	15.7
Mongolia	7	3	56.9	43.1	46.8	53.2
Nepal	8	1	-	100	81.9	18.1
Philippines	10	4	63.3	36.37	50	50
Singapore	10	2	74.4	25.6	67.2	32.8
Thailand	10	2	46.83	53.17	66.77	32.23
Viet-Nam, Rep. of	11	2	30	70	68	32

Source: - A study of the balance between academic and professional education, and in professional education between theory and practice in the preparation of primary school teachers.

- Questionnaire returns.

1. Including practice teaching during the course and excluding a one-year internship after the course.

Table 11. Balance in the curriculum of secondary teacher education

Country	Number of previous years of schooling	Duration of the training course (years)	Balance between academic and professional education taking into account the teacher education course only		Balance between theory and practice in the teacher education curriculum	
			Academic	Professional	Theory	Practice
			Percentages			
Afghanistan	12	4	83	17	70	30
	12	2	25.6	74.4	90	10
Burma	10	5	84	16	32	68
	14	1	36	64	60.5	39.5
India	11	4	66	34	20.6	79.4
	14	1	15	85	41	59
Korea, Rep. of	12	4	53.5	46.5	81.5	18.5
Malaysia	16	1	-	100	70	30
	11	2	77.3	22.7	85.7	14.3
	13	4	...	...	...	...
Nepal	10	4	65	35	93	7
	14	1	26	74	88	12
Philippines	10	4	76	24	77	23
Thailand	12	2	...	...	...	...
	12	4	75.7	24.3	72.5	27.5

Source: Questionnaire returns or other documents received.

post-student-teaching seminar which follows at the end of the off-campus teaching period, when he gets the benefit of a review and discussion of his achievements and the evaluation of his work is finalized. While all of these phases, or at least the first three, are present in the student-teaching programmes of most of the institutions for primary teacher training, and to a lesser extent in institutions for secondary teacher training in many of the Member States, the organization and the duration for each of these activities differ considerably. Teaching hours may be programmed daily for one or two weeks in a semester, or student-teachers may be sent to school for whole weeks or months for single block-teaching practice.

The requirements for enrolment in student teaching also show considerable variations among the Member States. In some, there is no requirement at all. In others there are examinations to be passed in certain required professional subjects before one could enter practice teaching in the off-campus schools.

Supervision and evaluation of practice teaching also differ considerably. While student practice is supervised and evaluated in some Member States by the supervisors of the teacher training institutions themselves, it is done jointly with co-operating teachers in others. In still others, the responsibility for evaluation is mainly that of the co-operating teachers, the supervisors of the teacher training institutions acting only as advisers and, when necessary, as moderators. The evaluation may be internal or external. Where it is internal, it is generally continuous assessment, except in some countries where three or four set lessons are seen and evaluated at the end. Where it is external, it is usually a Board of two or three examiners from other institutions observing a few lessons and marking them on the basis of actual performance at the time. The grades given are then added to the grades obtained in other student-teaching activities, moderated sometimes on the basis of the earlier internal evaluation by the supervising and co-operating teachers.

For the secondary teacher education course, there is no practice teaching requirement in Laos. In the Republic of China, at the other extreme, the fifth year of training is a full year of 'internship' in school. In Nepal, practice teaching is

done after the final examination. In the Khmer Republic, student-teachers in secondary teacher training institutions have two weeks of observation of teaching in the first semester, and a practice teaching period of 6 weeks later. This is supervised and evaluated by Directors of Practice Teaching, chosen from among competent professors and others not necessarily from the institutions concerned. After receiving the diploma, teachers are appointed to primary or secondary schools on probation for a year, which is considered as a period of 'internship'or a second period of student teaching added to the first year of teaching in the Faculty of Education.

Practice teaching is usually done in attached practising schools variously called demonstration schools, experimental schools, model schools or laboratory schools. There are no laboratory schools attached to primary teacher training institutions in Indonesia, Iran, Malaysia or Singapore. All but a few institutions have laboratory schools in Afghanistan and Nepal. In India, some States have laboratory schools in all primary teacher training institutions. About 50% of the institutions for secondary teacher training also have attached laboratory schools in India. In Afghanistan, Burma, Ceylon, the Republic of China, Indonesia, Japan, the Khmer Republic, the Republic of Korea, Pakistan, the Philippines and the Republic of Viet-Nam almost all institutions for secondary teacher training have attached laboratory schools.

Evaluation

Evaluation of theory subjects and student teaching is internally done in the teacher training institutions in Afghanistan, Japan, the Republic of Korea, Laos, Philippines, Singapore and the Republic of Viet-Nam. Theory examinations are externally conducted in Burma, India, Indonesia, Malaysia, and Pakistan. In Ceylon, an external examination is retained in 'core subjects' while all other subjects are internally assessed. In the Republic of China, an external examination is held in Chinese and Mandarin; all other subjects are internally assessed. Student teaching is assessed internally by the institutions themselves in all these countries although, in some of them, external examiners are also included in the practical examination boards (as in the Khmer Republic).

In-service education

The authorities in charge of in-service education in the Member States are generally the Departments of Teacher Education in the Ministry at the national level, and the teacher education centres (training institutions or other education institutions) at the local level. There are several variations, however In Burma, many other agencies of Government collaborate with the Teacher Education Department in organizing in-service courses. In Nepal, it is mainly the function of the primary teacher training centres and the University department of education. In Japan, in-service education is a function of the Ministry of Education and of the local Boards of Education and not of the teacher training institutions. In countries like Malaysia and Thailand, it is mainly the responsibility of the Ministry of Education, Teacher Training and School Divisions and the Inspectorates, Federal or Regional. In Ceylon, it is carried out mainly by the Curriculum Development Centre of the Ministry of Education.

In most countries, in-service education has two functions: (1) to enhance specific content knowledge and competencies of teachers, and (2) to help teachers to upgrade their general qualifications. In Ceylon and Nepal, it is used to clear the backlog of untrained teachers or improve their qualifications. In the Republic of China, in-service courses are organized for upgrading the qualifications of teachers on a compulsory attendance basis. In India, it is used to update the knowledge of teachers and to enable them to acquire degrees like the B.Ed., Diploma in Education, and M. Ed. In the Khmer Republic and the Republic of Korea, in-service education is used to train school inspectors and educational administrators, as well as to upgrade the professional competence of teachers. Until recently, in-service education was the only means of training women teachers in Afghanistan.

The usual method of organizing in-service education is through institutes, seminars, workshops and conferences. Innovations are recently beginning to show in some of the countries. For example, there is the organization of 'credit courses' which cumulatively will lead to the acquisition of degrees at the end of several sessions, or help to get increments in salary and promotion. The Philippines has given a lead in this scheme,

and in-service courses are organized as credit courses also in Afghanistan, Japan and the Republic of Viet-Nam. In-service courses of longer duration have been organized in India, Iran, Pakistan, Philippines and Thailand, to help teachers qualify for higher diplomas or degrees in education. In Thailand, 'twilight courses' and courses for external certification are available to teachers in service to further their qualifications. Correspondence courses are also being increasingly used now for in-service education. They were used in Burma as a means of preparing candidates registered for the degree of B. Ed. (old regulations) when it was abolished, and have been re-installed for teachers who wish to improve their qualifications by taking the Post-Graduate Diploma in Education. Ceylon is preparing for correspondence courses to clear up a backlog of untrained teachers; in India, correspondence courses are already being utilized for this purpose. In Iran, the Higher Teachers' College of the Army of Knowledge uses correspondence courses for raising the qualifications of rural teachers. In-service education is provided as a built-in part of the Teacher Education Correspondence Tekhnikum in Mongolia for upgrading the qualifications of teachers. The Correspondence Department of the Pedagogical Institute of Mongolia offers similarly several programmes in content subjects which lead to university degrees.

Permanent centres for in-service education have been established in some of the Member States. There are 4 permanent in-service centres in the Republic of China, two for the training of secondary school teachers, one for the in-service training of teacher educators and one for the further training of elementary school teachers. Extension centres have been established in selected teacher training institutions in India at the local level; there are co-ordinated by State Institutes of Education at the provincial level and by the National Council of Educational Research and Training at the central level. A national education centre for conducting in-service courses functions also in Japan as an agency of the Ministry of Education for conducting in-service courses. Five primary teacher training centres in Nepal are also centres for extension programmes. Educational extension centres have been established in Pakistan to conduct regular in-service courses for primary and secondary teachers. In the Philippines, there are 20 regional in-service training centres which organize in-service courses for

supervisors of primary education and conduct 'echo' conferences by repeating the in-service courses conducted by the Department of Education through the Bureau of Public Schools at the central level. The Teacher Training College in Singapore functions also as an extension centre for in-service education in the State. A permanent training centre at the national level and 10 centres in the teacher training colleges at the regional level exist in the Republic of Viet-Nam for the purpose of conducting in-service courses for teachers during vacations.

Research

Teacher training institutions have not in the past shown much activity in educational research, even of social accounting type. In very recent years, the role of teacher training institutions in educational research is beginning to attract attention in some of the Member States. In Burma, for example, one of the functions of all teacher training institutions, as officially laid down in 1969, is "to engage in research work that would contribute to widening the horizon of the knowledge of teachers, improve their teaching techniques and raise their intellectual and professional level." In the Republic of China, every teacher is expected to conduct personal studies and is given an additional remuneration for this. In India, teacher training institutions for primary and secondary teachers are being encouraged to take up research projects on practical problems, and grants are made available through the State Institutes of Education. In the Philippines and Singapore, individual and co-operative studies have been done by individual instructors and professors.

In the institutions for secondary teacher training, research is usually a part of the Master of Education programme; a good many dissertations on selected topics are therefore found on their shelves. In some of the countries, research training has been included also in the first degree programme. Even in countries where this is not done, some training is given in research to student teachers, as they are required to make simple surveys and case studies of pupils as a part of the student-teaching programmes.

The encouragement given to teacher educators takes many forms. In the Republic of China and the Republic of Korea,

apart from additional remuneration given to the professors for personal study, a reduced teaching load is also given. In the Republic of Korea, Nepal, the Philippines and Thailand, a research is provided with clerical help and the institution undertakes the publication of the study.

Research in teacher education is undertaken by centres or departments organized in teacher training institutions, by universities and by organizations other than the institutions. The IKIP's in Indonesia each have a centre for research in education. An institute of educational research is located in each of the higher teachers' colleges in Iran. In India, the NCERT and the University Grants Commission offer fellowships to individual research workers and institutions, and publish - or aid the publication of - the findings. In the Khmer Republic, the Office of Educational Services, the Psycho-Technical Section of the Office of Education and a National Committee of Khmerization conduct research studies. There are two Institutes of Education in Pakistan which are engaged in training for research as well as in undertaking research studies. In the Philippines, the divisions in the Bureaus of Public, Private and Vocational Education carry out research. In Thailand, the Bangkok Institute for Child Study in the College of Education, Prasarnmit, the Department of Educational Research at Chulalongkorn University and the Lanna Thai Research Centre of Chiang Mai University are engaged in educational research.

Teacher educators

The problem of staffing teacher training institutions has grown in urgency as the training systems have expanded. Allied to the quantitative problem of supply is the need to ensure that the trainers of prospective teachers have the qualifications, experience, skills and competence that are called into play in preparing teachers for the schools in a changing social and economic environment. A greater awareness is beginning to emerge in the region that the 'trainers of trainers' (teacher educators) have a key role in vitalizing the training programmes and that therefore the preparation of teacher educators should receive prior attention.

The Regional Conference of National Commissions for Unesco in Asia, held in Manila in January 1960, put up for the

first time, proposals for the establishment of an International Teachers' College as part of the plans for facilitating the implementation of the Karachi Plan. The proposals found acceptance at the General Conference of Unesco held in November 1960. The Conference recommended the training of high-level teaching personnel in sufficient numbers in each country through the establishment of special institutions in the Asian region at the national level, and the establishment of special institutions at the regional level. A Regional Centre for the Training of Teacher Educators in Asia was accordingly established in 1962. It is now known as the Asian Institute for Teacher Educators. It offers high-level courses for selected key primary teacher educators from Asian Member States and assists the Member States, at their invitation, in problems relating to teacher education.

The first national-level institution for the training of teacher educators for training primary school teachers was established in Afghanistan in 1964. In 1966 a full-time 9-month diploma course in elementary teacher education was started by the National Council of Educational Research and Training in India. In 1967 a training course of 12 months' duration for teacher educators was established in the Republic of Viet-Nam. An Institute for Teacher Educators was established in the Education Ministry of Ceylon in 1968 and began its work by organizing seminars, workshops and conferences on specific areas of the curriculum and methods for improving teacher education. In 1969, Nepal proposed the establishment of an institution for training the graduate teacher educators of primary teacher training centres and, in 1970, a two-year programme was initiated for the purpose.

The four-year programmes of training for primary school teaching in some countries are intended to produce better-qualified primary school teachers who could fill the position of teacher educators in the training institutions for primary level teachers. In the Philippines, where the training courses are of four years' duration, supplementary in-service seminars and workshops are organized by the Department of Education for teacher educators.

Teacher educators for institutions preparing second-level teachers are generally prepared in universities or teachers'

colleges through the M. Ed. and Ph. D. programmes. In many universities of India, teacher education has been offered recently as an elective course in the M. Ed. programme.

The standards of basic qualification required for teacher educators have been raised by the Member States in the last few years. Generally the trend appears to be to raise the requirements of academic qualification rather than professional training. One reason may be in the fact that in most Member States strong post-graduate programmes in education have yet to develop. In the final analysis it is a strong and diversified post-graduate programme that alone can ensure a reliable source of supply of teacher educators. The following Table presents information about the qualification requirements for teacher educators.

Table 12. Minimum qualifications for teacher educators, Asian region

Country	Qualifications
Afghanistan	Bachelor's Degree and Teaching Diploma from Academy of Teacher Education; also, teaching experience at primary and upper secondary level (1 and 2)
Burma	Bachelor's Degree and Degree in Education (1 and 2)
Ceylon	10-year school (G.C.E. 'A' level) certificate and Specialist Teacher's Certificate, or Bachelor's Degree and 3 years' teaching experience (1); same with 5 years' teaching experience (1 and 2)
China, Rep. of	Bachelor's Degree in Education (1 and 2)
India	Bachelor's Degree and Degree in Education (1 and 2), Bachelor's Degree with Master's Degree in Education or vice-versa (3)
Indonesia	Bachelor's or Master's Degree in Education (1), Master's Degree or Doctorate in the subject (2 and 3)

Table 12. Minimum qualifications for teacher educators, Asian region (cont'd)

Country	Qualifications
Iran	Licentiate or B. Ed. Degree (1), Master's or Doctorate Degree usually from abroad (2 and 3)
Khmer Republic	Master's Degree or Ph.D. (2 and 3)
Korea, Rep. of	2 years of university, or Bachelor's Degree with prescribed years of teaching experience and research which vary with qualifications (1, 2 and 3)
Laos	Secondary school graduation and primary school teaching experience (1), higher studies and training abroad (2)
Malaysia	Malaysian Certificate of Education or overseas Senior Cambridge and Normal Class or College Training Diploma (1); M.C.E., Senior Cambridge and Normal Class or College Training, or Bachelor's Degree and Teacher's Diploma (2); Post-graduate Degrees (3)
Mongolia	...
Nepal	Bachelor's Degree, with or without education (1); Master's Degree with Education Diploma or experience (2 and 3)
Pakistan	Bachelor's Degree and Degree or Diploma in teaching (1); Master's Degree and degree or diploma in teaching (2 and 3)
Philippines	Bachelor's Degree in Education with teaching experience and Civil Service eligibility (1); Post-graduate in Education with teaching experience and civil Service eligibility (2)
Singapore	Training College Certificate or Bachelor's Degree and Diploma in Education (1, 2 and 3)

Table 12. Minimum qualifications for teacher educators, Asian region (cont'd)

Country	Qualifications
Thailand	Bachelor's Degree in Education (1, 2 and 3)
Viet-Nam, Rep. of	12-year school + 4-year training (though many accepted after 11 years + 2-year training) (1); Training abroad (2)
Japan	Master's Degree or Ph. D. (1, 2 and 3)

Source: Questionnaire returns and reports received.

Note: 1, 2 and 3 indicate primary, lower secondary and upper secondary levels of teacher education.

Perspectives of the 1970s

The Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia which was convened by Unesco at Singapore on 31 May - 7 June 1971 reviewed the progress and prospects of education in Asia and recommended three guiding principles for the development of education in the Second Development Decade;

1. to promote national policies directed towards making education available to the whole community as the means for the full development of human resources...;
2. to initiate and sustain the reform and reorientation of /national/ education systems...;
3. to encourage innovations as regards the content, methods and structures so as to enhance the capability and performance of the education systems to meet the requirements of quantitative growth and qualitative improvement of education. [2]

A major theme that emerged from the deliberations of the Conference as it surveyed the perspectives of the 1970s

2. Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia (Singapore, 31 May - 7 June 1971). *Final Report*, Paris, 1971. p. 49

was the need to undertake the tasks of educational reform, not piecemeal, but through 'a global innovative approach'.

The training of teachers is a critical element in the designing and carrying through of any reform in education or in the development and use of innovative approaches.

The Working Document of the Conference[3] identified some of the inadequacies in the present teacher education programmes in the region and indicated the broad directions in which reform measures need to be explored. It stressed the following points for concern:

1. The curriculum content of teacher education programming is largely based on out-moded concepts and has failed to keep pace with the advancement of knowledge.
2. While the teacher's task is becoming more and more complex, the teacher education programmes have not shown adequate awareness of the changing roles of teachers and schools in the national setting.
3. There is a wide gap between the methods advocated by teacher education institutions and what they actually practise in training teachers.
4. Teacher education institutions have tended to isolate themselves from the schools for which they prepare teachers, and the problems of teaching under actual conditions as they are in the schools are not reflected in teacher education programmes and their methods.
5. By and large, teacher education institutions tend to adopt uniformity and routine in their training methods and consequently have not been able to contribute substantially to new advances in educational science or show responsiveness to them.

What the Conference Working Document identified as areas of need for the further development of teacher education serve also as the conclusions of the present Regional Survey.

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3. Unesco. *Growth and Change: perspectives of Education in Asia* (in press).

The areas of need in the improvement of teacher education, as seen by the Conference, are the following:

1. to develop unified national policies for the training and supply of teachers and to evolve appropriate mechanisms for the planning and establishment of norms and standards for teacher education;

2. to evolve suitable recruitment policies, salary-schedules and salary-structures in order to attract to and retain in the teaching profession the right number of candidates and of right qualities;

3. to reorganize teacher education curriculum by the application of curriculum analysis techniques to the end that curriculum development becomes a means of continuously upgrading the quality of instruction and training;

4. for systematic experimentation with new forms of organization, methods and techniques in teacher education, recognizing that there is no single approach to the education and training of teachers and that the complexities of the teaching task call for diversity of techniques and methods;

5. to test out and use new educational technologies in the preparation of teachers;

6. to develop selected teacher training institutions into experimental institutions with their principal focus on devising, testing and appraising new curriculum models, training techniques and instructional materials for the training system in the country;

7. to treat the education of teachers as a life-long pursuit and to this end provide systematic programmes of in-service education and articulate them with pre-service education;

8. to articulate, and wherever possible integrate, the

training of teachers for the first and second levels into the comprehensive type of teacher education institutions ;

9. for teacher training institutions to be closely associated with the schools in their area, providing them with professional advice and services and promoting innovative activities on a continuing basis ;

10. to orient teacher training institutions to the development needs of their communities, recognizing the inter-relationships of the school, home and society, and of formal education and other forms of education.

11. the need to involve teachers, teacher educators and their organizations in the designing and implementation of educational reforms ; and

12. the need to develop strong post-graduate programmes in education designed to meet the requirements of the education system for highly qualified manpower.

PART III

NATIONAL SYSTEM

AFGHANISTAN

Education system

It was in 1912 that the first institution to train primary school teachers, the Darul Mo'Allamein was started in Kabul. Pashto was adopted as the language of instruction in all institutions. The Kabul University was formally established in 1946, although some faculties were started some years earlier to promote higher education. Planned development of education began in 1957 - the third five-year plan has been in operation since 1967.

The system of school education is based on 12 years of study, from the age of 7, with six years of primary school followed by six years of secondary education which in some schools is divided into two levels of three years each - grades VII, VIII and IX being known as middle school and grades X, XI and XII as lycée.

Education in Afghanistan is provided at all levels by the government. All education is free and includes the supply of books and other materials. During the three five-year national development plans, about 15% of the national budget has been allotted for education; this is substantially augmented by foreign aid.

More than 85% of the population live in rural areas and some in widely dispersed villages. Some parts of the population are also migratory. Hence, appropriate institutions for education had to be devised in the educational development plan prepared in 1957. Since then, one-teacher schools (grades I-III), two-teacher schools (grades I-IV), mobile schools (grades I-VI) and boarding schools for all levels and types of education have been established. There are two types of

primary schools: (a) rural or village schools, and (b) schools imparting regular full primary education. Some primary classes are also attached to middle schools and lycées. More than 60% of the primary schools are village schools and these go beyond grade III if enrolment is favourable. Most primary and some secondary schools are operating in rented houses rather than in school buildings. Along with the quantitative development of education, efforts are being made to modernize the content and methods of education.

Legally, six years of primary education is compulsory. An increasing proportion of students go on to secondary and higher education wherever there are facilities. The annual rate of enrolment increase since 1950 has been 10% at the primary stage, 20-25% at the secondary stage, and 15% in higher education. Enrolment in 1970 showed that these percentage have been exceeded.

The following statistics show the number of schools and pupils in the various types of education in 1970. Enrolment in primary education was 22% of the age-group, of which 14% were girls.

	Schools	Pupils
Village schools	1 852	...
Primary	1 191	540 000
Middle	408	82 000
Secondary	133	26 000
Technical and Vocational	15	5 380
Teacher Training	25	...
University	1	6 215

Teacher education

Even in the early stages of educational planning it was realized that the lack of qualified teachers was the greatest constraint on the development of education in Afghanistan. Teacher training was therefore accepted as a priority area in the educational development plans, and a number of measures have been taken with a view to producing more teachers and to improving the quality of their training. One of the early steps taken was the establishment of an Institute of Education in the University of Kabul in 1954, which worked in collaboration with

the Ministry of Education in organizing primary teacher education on new lines.

Management, control and financing. Administration is centralized; and the Ministry of Education has the essential responsibilities in determining curricula and financing and supervising the school system. Provincial directors function under the authority of the department presidents in the Ministry of Education in executing the programmes. Four departments directly responsible for the development and promotion of education at all levels are: Departments of Primary, Secondary and Vocational Education and the Department of Teacher Training. These departments are responsible for preparing teaching materials or manuals and revising them, organizing pre-service and in-service education of teachers, supervising schools, and approving and supervising examinations at grades VI, IX, and XII.

A teacher training division, responsible for the training of teachers for primary and junior high school levels, was established as part of the Vocational Education Department of the Ministry of Education in 1960. It was later developed as a separate Department of Teacher Training in 1966.

Types, levels and duration. The teacher training programme is conducted at present through (a) regular Teacher Training Institutes for primary teacher training, (b) Higher Teachers Colleges for training middle school teachers, (c) The Faculty of Education of the University for training lycée teachers, and (d) The Academy for Teacher Educators for preparing teacher educators. There are separate programmes for the training of religious teachers, teachers for physical education and teachers for technical education.

Regular Teacher Training Institutes. Until 1956, formal teacher training at lycée level (grades X, XI and XII) was carried out at the DMA, Kabul (Darul Mo'Allamein). By 1969, the number of primary teacher training colleges had increased to 8. These DMAs are situated in (1) Kunduz, (2) Kandahar, (3) Jallalabad, (4) Herat, (5) Mazar-i-Sharif, (6) Charikar, (7) Gardiz, and (8) Kabul. Associated with each is a laboratory school and some co-operating schools for teaching, demonstration and practice. The recent trend is to abolish gradually

grades VII-XII from all teacher training schools and only offer one year of professional training course after high school or lycée education.

As primary teacher training ended at grade XII, the qualifying point for entry to a university, many of those who were trained entered the university instead of the teaching profession. A National Commission of Education, set up by the government in 1967 to propose reforms in the educational system, therefore recommended that primary school teachers should be progressively trained at the post-secondary level, through an intensive and specialized course in grade XIII. Accordingly, a professional one-year course of training at the end of the grade XII was started in 1970. This programme was first introduced as an experimental measure in the DMAs in Kabul, Kandahar and Jallalabad and was later expanded to cover all DMAs.

To meet the need for teachers for the expanding primary schools, an emergency training scheme was introduced in 1962. The scheme provided a three-year course in general education at grades VII-IX, to be followed by a one-year course of professional training (grade X) leading to a teaching certificate for the primary school grades I-III in rural areas, to be provided in the existing DMAs. Groups of emergency trainees were arranged in classes of 35 and attached to middle and lycée schools throughout the provinces. There were 29 such centres. The scheme was originally intended for one batch of students only, but was continued for a few more years in order to meet the shortage of teachers. The scheme is being gradually terminated.

The Higher Teachers College. The training for teachers at the middle school level as provided by the DMAs was at grade XII level. This was considered unsatisfactory. To raise the qualification of teachers for middle schools and to meet the need for fully-trained teachers at this level, a Higher Teachers College was established in Kabul in 1964. It is designed to provide a two-year course beyond grade XII (grades XIII and XIV) with specialized teacher training in the sciences including mathematics and the humanities (languages and social studies). It is a co-educational institution.

By 1969, three Higher Teachers Colleges were established in the country for carrying out both pre-service and in-service

training in Kabul, Kandahar and Mazar-i-Sharif.[1]

Training of teachers for the lycées. Teachers for the lycées or upper secondary schools are drawn from various sources. The University of Kabul is the main preparatory institution for teaching at this level. University graduates from the Faculty of Science and Letters regard teaching in the lycées as one of the main vocations open to them. The number of university-trained personnel teaching in the lycées is very small, however. Further, these graduates have little training for teaching, except to the extent that some of them would have engaged in part-time teaching in a secondary school and gained some teaching practice. In 1962, therefore, a Faculty of Education was established in Kabul University with a four-year degree programme to train teachers and supervisors and to strengthen the pedagogical education of the trainees in the Faculty of Science and Letters.

Academy for Teacher Educators. To supplement the preparation of teacher educators provided by the Faculty of Education, a co-educational Academy for Teacher Educators was established in 1964 in Kabul. This institute has a unique function in providing a direct practical training for teacher educators. A Training College for Primary Teachers organized as part of the Academy (with a three-year course which is now reduced to one year) serves as a demonstration training college for the teacher educator trainees, who are university graduates and usually have some secondary school teaching experience. The teacher educator trainees spend one year at the Academy, teaching and guiding the students of the training college, under the supervision of an internationally recruited staff. Their courses, at post university-graduate level, include studies in the theory and practice of education, English language, and special methodology. In the demonstration school attached to the Academy, they learn to direct and supervise students in the practical arts of teaching. After graduating from the Academy, the teacher educators are available to staff the training colleges throughout the country. About 60 teacher educators are being trained every year. The training school and the practising school serve as a

1. A fourth Higher Teachers College was opened in the Jallalabad, DMA in 1971.

pattern for all teacher training institutions, and so, have good buildings with laboratories for science teaching, library, lecture rooms and staff rooms. An educational broadcasting service has now been started for the training of primary school teachers.

Admission and enrolment. The following qualifications are now required for the different training courses: (1) for the one-year pre-service course for training primary school teachers, graduation from grade XII; (2) for the two-year pre-service courses for training first-cycle secondary (middle school) teachers, graduation from grade XII; and (3) for participants in training courses for school administrators and pedagogical supervisors, qualifications equivalent to graduation from lycées or universities, preferably with some years of field experience.

When the minimum educational qualification for admission to primary teacher training courses was a creditable pass in the grade IX examination, the minimum age for admission was 16 years; now it is 19. No written tests are given to the candidates for selection. A medical examination is conducted and anyone suffering from contagious diseases or observable physical defects is debarred. Confidential reports from the principals of the schools attended by the candidates on their character, health and academic performance are usually called for. The needs of different areas are taken into account when recruitment is made.

Shortage of qualified teachers is the greatest problem in secondary education: it is difficult to find enough qualified persons to enter the profession because, compared to other professions, it is not well-paid.

Student-aid. Students under training in the 3-year course were, until some time ago, being paid a monthly allowance of Afs. 100 (grade VII), Afs. 150 (grade VIII), Afs. 200 (grade IX) in addition to the provision of books, as an emergency measure to attract them to teaching. No monetary allowance is paid now. Primary teacher trainees are not charged any tuition fees. Candidates who are given stipends or scholarships are required to teach for a fixed number of years.

Facilities. Many of the buildings are old, and in these the rooms are inadequate. Equipment used for teaching is mostly improvised locally. There is also a dearth of books, although more and more books in Persian are becoming available. Practice schools, and primary and middle schools, usually do not have electricity nor adequate laboratories and science equipment, but the situation is rapidly improving.

Organization of instruction. In the one-year DMAs there will now be three basic departments - Education, General Studies and Science. As the Education Department will be the co-ordinating agent for the whole course, the Head of this Department would also be the Vice-Principal. Within each Department sub-departments may be established, for example in Language Arts or Mathematics where numbers are sufficient to make this necessary.

Responsibility for the various subjects is allocated as follows:

General Studies Department

1. General Studies
2. Teaching Methods: Social Studies and Islamic Studies

Science Department

1. Teaching Methods: Agriculture and Home Economics
   Health Education
   Mathematics
   Science

Education Department

1. Professional Studies
2. Teaching Methods: Arts and Crafts
   Language Arts
   Library
   Physical Education
   Teaching Materials
3. Background Studies

There are 6 departments in Higher Teachers' College:

1. Department of Education which takes care of the following subjects:

Survey of teacher education

a) Principles of teaching
b) Educational psychology
c) Audio-visual teaching materials
d) Methodology
e) Student teaching

2. Department of Science

a) Chemistry
b) Biology
c) Physics
d) Mathematics

3. Languages

a) Pashto
b) Dari
c) English

4. Department of Humanities

a) History
b) Geography
c) Islamic studies

5. Department of In-Service Education (extension)

6. Department of the Library

Curriculum

Darul Mo'Allamein. The curriculum offering for the three-year course consists of general education, professional education and student teaching. There is no specialization in any subject.

General education includes courses on Theology (Religion), Languages (Pashto, Dari and English), Natural Sciences (Biology, Geology, Chemistry and Physics), Mathematics, Art and Agriculture, Sociology (History, Geography and Community Development), Physical Education and Health. Professional education subjects include Introduction to Education, Psychological Foundation of Education and Methodology and Student Teaching. All subjects are compulsory; course programmes are fixed by the Ministry.

The course of training for primary school teachers (i.e. one-year course in grade XIII) includes the following (each week has a total of forty periods of 45/40 minutes):

1. General Studies	8 weeks
2. Professional Studies	18 weeks
3. Background Studies	2 weeks
4. Practice Teaching	12 weeks

Time Table

Subject	Periods per week	
GENERAL STUDIES		
Education in Afghanistan during the last 50 years	2)	
Sociology in Afghanistan	3)	8
Modern Afghanistan	3)	
PROFESSIONAL STUDIES		
Children's Development	3)	
Educational Psychology	3)	11
Principles of Education	3)	
School Administration and Supervision	2)	
Teaching Methods:		
* Agriculture	2)	
Arts and Crafts	2)	
Health Education	1)	
* Home Economics	2)	
Language Arts	3)	19
Library	1)	
Mathematics	2)	
Physical Education	2)	
Science	2)	
Social Studies and Islamic Studies	2)	
Teaching Materials	2)	
BACKGROUND STUDIES	2)	2
		40

* Alternate subjects for boys and girls.

Subject	Periods per week	
PRACTICE TEACHING		
Preparation	2)	
Observation	2)	
Teaching	4)	12
Discussion	2)	
Child Studies	2)	

Curriculum of Higher Teachers College. There have been few changes in the curriculum of Higher Teachers College since it was first introduced. The College trains teachers in science and humanities. The curriculum of the two fields is as follows:

A. Science	Periods per week
1. Biology	4
2. Chemistry	4
3. Physics	4
4. Mathematics	4
5. Languages	
a) Pashto	3
b) Dari	3
c) English	3
6. Islamic Studies	1
7. Health	1
8. Library	1
9. Physical education	1
10. Professional subjects:	
a) Principles of Education	2
b) Educational Psychology	3
c) A-V teaching materials	2
d) Methodology	2
e) Student teaching	1
Total	39

B. Humanities	
1. History	6
2. Geography	6

B. Humanities (cont'd)	Periods per week
3. Languages:	
a) Pashto	3
b) Dari	3
c) English	6
4. Professional Studies:	
a) Principles of Education	2
b) Educational Psychology	3
c) Methodology	2
d) A-V teaching materials	2
e) Student teaching	1
5. Islamic studies	1
6. Health	1
7. Library	1
8. Physical education	1
9. Practical library work in geography	1
Total	39

The new curriculum of the Academy for Teacher Educators, Kabul is as follows:

	Hours per week
1. Educational Psychology	3
2. English	3
3. Teaching material	2
4. Audio-visual education	2
5. Library Science	2
6. Educational Administration	2
7. Curriculum Development	2
8. Supervision	2
9. Child Development	2
10. Student	6

Student teaching. Most of the training institutions in Afghanistan have laboratory schools which are directly under the heads of the training institutions. These laboratory schools are generally also used for special observation based on the theory classes in professional education and, occasionally, for experimenting with local materials, demonstration and for

setting up model classrooms. Observation is done at the beginning of practice teaching. Most of the institutions for primary teacher training utilize the facilities of off-campus schools for organizing their student teaching programme.

The scope of student teaching includes organizing instructional materials, experimenting with teaching methods not only in the classrooms but also in student teaching seminars, participating in management of children on the playground, on field trips, etc., participating in staff plays, helping in the co-curricular activities of the laboratory and co-operating schools, and in some cases participating in community activities such as in the celebration of national holidays and teaching literacy classes in the community schools. Material aids to student teaching supplied to student teachers are Handbook or Manual for Student Teachers, Lesson Plans and Forms for Self-Evaluation of Teaching.

In the DMAs, student teaching is done in the last year of training in a laboratory school and in a co-operating school, off-campus. It lasts the whole year, the student spending 7 hours each week in the school. The students are expected to prepare lesson plans and audio-visual aids, and to organize and participate in co-curricular activities. Evaluation is done by the supervising teacher and the supervisor. The student also evaluates himself. The pre-requisite for student teaching is completion of the required academic load.

As the one-year course (grade XIII) is a practical one, the student's work is assessed continuously. In teaching practice, for example, his work throughout the practice should decide his mark, not just his performance in one or two lessons. Furthermore, he should receive regular assignments, or set work which he will complete in his own time, and which will be marked and form part of his final assessment.

In the Higher Teachers College, student teaching is done both in the 13th and 14th years. The one hour of student teaching in grade XIII is used only for observation, but in grade XIV it is used partly for observation and partly for actual teaching. Towards the end of the college year in grade XIV two whole weeks are allotted for block student teaching.

Evaluation. A mid-term and a final examination are an essential part of the primary teacher training course. There are four examinations - in General Studies, Professional Studies, Teaching Methods and Background Studies. The examination includes different kinds of tests, the objective tests, as well as oral test.

The work of the Higher Teachers' College students is continuously evaluated by the instructors throughout the year; in addition, there are two main examinations, a mid-term examination and a final examination. These examinations are carried out internally and are not controlled by the Ministry of Education or any other agencies.

Teacher educators

Qualifications. Qualifications prescribed by the Teacher Training Consultative Committee, Ministry of Education, Kabul, in 1968 are as follows: Principals should have a university degree, preferably in education, a diploma from the Academy for Teacher Educators, Kabul, further study abroad, and some administrative experience. The departmental staff should have a university degree and a diploma from the Academy for Teacher Educators, Kabul (including teaching experience at the primary and upper secondary levels). Staff working in Teaching Materials, Physical and Health Education, Arts and Crafts and the Library should have a grade XII certificate or higher qualifications; e.g. Higher Teachers' College Certificate or a university degree, special training in the subject and a course of training at the Academy for Teacher Educators, Kabul.

Most of the Higher Teachers' College instructors are holding a college degree or above with experience in teaching. The library and physical education instructors of Higher Teachers' College are lycée graduates.

The General Directorate of Teachers' Placement is the organization in the Ministry of Education concerned with the recruitment of teachers and their promotion. The university has its own rules of recruitment.

Staff gradations and duties. Each teacher education institution has a Director, who has under him an Instructional Assistant, a Professional Assistant and an Administrative

Assistant. The work of the teaching staff of the different departments is co-ordinated by the Instructional Assistant or the Professional Assistant. The staff of the DMAs and Higher Teachers Colleges lecture in methods of teaching, help in the organization and supervision of teaching practice, evaluate students' progress and maintain records, prepare lesson plans, give demonstration lessons, supervise library assignments and participate in co-curricular activities. Further, they help in planning and holding in-service training courses for teachers.

In-service education

Winter and summer vacation courses and short courses are provided for professional training of untrained or under-trained personnel at two levels - the DMA level (grades IX-XII) and the university level, and regular in-service courses are provided by the Higher Teachers Colleges. This intensive, continuing in-service programme, started in 1955, has helped several hundreds of teachers to gain additional training as well as credits. In the 1964 sessions, women who attended the summer courses numbered 141, and the winter courses had 110 women. Until the Higher Teachers College and the Academy of Teacher Training became co-educational the professional training of women teachers was mainly provided through in-service courses.

The major responsibility for in-service education is now taken mainly by the Department of Teacher Education. Elaborate schemes have been prepared for in-service education of 12-grade teachers in grade XIII courses and for the untrained middle school teachers in the H.T.C. course through part-time training programmes. These will be tried as pilot projects in Kabul DMA and H.T.C. in 1971 and then adopted in other institutions.

Research

The pilot centres carry out experiments for education authorities such as experiments on school plant and furniture to promote standardization and the effective utilization of teaching staff and aids. The Faculty of Education of the University of Kabul publishes its own journal as well as occasional bulletins. A University Research Centre organized in 1967 to

encourage research in all university department gives advice and assistance to faculty members engaged in research. The Institute of Education of the University has undertaken experiments in a laboratory school to improve primary school curriculum, and has produced materials in science and social studies for middle schools and in science and mathematics for upper secondary schools. Textbooks and teachers' guides have also been prepared by the Institute.

UNION OF BURMA

Education system

Immediately after the declaration of independence in January 1948 Burma entered a new phase in her educational history. Some attempts were made to reform education to suit the new situation. A Unesco Education Mission visited the State in December 1950. In November 1951 an education mission known as "Burma Educational Observation and Study Mission" was sent abroad to study at first hand the educational systems of some countries. Based upon the recommendations of the Mission and the Education Reorganization Committee, the Education Plan for Welfare State set forth the first Four-Year Education Plan, 1952-56. The new pattern of the school system was 4:3:2, with primary education of four years' duration, followed by three years in middle schools and two years in high schools. An examination of the pupils was conducted at the end of the primary education stage by local examination boards. At the end of middle school there was a public middle school examination; at the end of high school, there was another public examination, known as High School Final and Matriculation Examination. Tuition was made free throughout the entire education system including the university.

In 1959, some changes were made in this pattern. The duration of the high school department (upper secondary level) was increased from two to three years. With this alteration, the combined High School Final and Matriculation Examination was replaced by two separate examinations, the High School Final Examination to be taken at the completion of the 9th year and the Matriculation Examination, at least one year after passing the High School Final. Thus the education system became 4:3:2:1.

Text based on Report from the Department of Education, Burma, and Unesco and government documents and other reference material.

In 1960, a new Government was formed, and the Third Education Plan (1960-64) was evolved; but before it could be implemented, a great change took place in the country. In 1962, a Revolutionary Council took over control of the country and started on a policy which affected every developmental aspect of life of the country.

Present structure and organization

The structure of the school system was changed from 4:3:2:1 with the introduction of the New Basic Education System in 1967-68. The present structural pattern is 5:4:2, making for a total number of 11 years of schooling. This is expected to be lengthened in the course of time. The Union of Burma Basic Education Act prescribes five years as the minimum age for school admission in the primary level.

A new education policy was announced by the Revolutionary Council:

> "The Revolutionary Council believes that the education system unequated with livelihood will have to be transformed. An education system equated with livelihood and based on socialistic moral value will be brought about. Science will be given precedence in education.
>
> Our educational target is to bring basic education within the reach of all. As regards higher education, only those who have promise and enough potentialities and industriousness to benefit from it will be encouraged."

To fulfill the aims and objectives of the new education policy, many changes have been made in the aims of basic education, the content of education, the textbooks and the training of teachers.

The following major steps have been taken to implement the education policy:

i) expansion of primary education and introduction of universal free compulsory primary education of at least five years to make basic education accessible to all children of the country;

ii) expansion of technical, agricultural and vocational education at the secondary level;

iii) intensification of the efforts to increase the output of the qualified teachers and to improve the quality of teacher education;

iv) expansion and promotion of the teaching of science;

v) introduction of co-curricular activities to provide experiences and practical training in socialistic moral values;

vi) orientation of higher education to produce specialists to meet the manpower needs of the country.

The medium of instruction in all schools and in all universities and new professional institutes is Burmese. Some technical terms in English are allowed to be used in the professional institutes.

Primary school enrolment has risen from 1.6 million in 1961-62 to 3.1 million in 1969-70. The enrolment ratio (age-group: 5 to 9 years) has risen from 58% in 1961-62 to 85% in 1969-70. The Government intends to make primary education compulsory by 1975.

The number of schools, students and teachers at the end of the academic year 1969-70 were as follows:

	Schools	Students	Teachers
Primary level	15 262	3 043 896	55 248
Middle level	986	585 661	13 093
High level	527	133 278	5 647

Teacher education

The teachers for the schools are supplied in the main by three categories of institutions: teacher training schools which train teachers for the primary classes, teacher training colleges which train teachers both for the primary classes and for the middle (lower secondary) classes and the Institute of Education which prepares teachers for the high school (upper secondary) classes.

In 1952, there were two teacher training colleges - one at Rangoon, and the other at Mandalay, in which courses for primary assistant teacher training and junior assistant teacher training were offered. Four teacher training schools located

at Moulmein, Meiktila, Bassein and Kyaukpyu also provided training for primary teachers. Those who had passed the matriculation examination were admitted to the junior assistant teacher training courses, while those who had passed the middle school examination were admitted to the primary assistant teacher training courses. For the training of senior assistant teachers a Teacher Training College (T. T. C.) was opened as a Constituent College of the University of Rangoon as far back as 1931. The College had to be closed down in 1942 (during the War), but was reopened in 1946-47 as the Faculty of Education in the Interim University of Rangoon.

Under the University Education Law of 1964, the Faculty of Education, University of Rangoon, was reorganized as an Institute of Education, an independent professional institute offering degree courses for education.

Management, control and financing. Since all schools and other educational institutions are established and maintained by the State, all teacher training establishments are controlled and financed by the State. To meet the demands for trained teachers, especially primary teachers, as a result of unprecedented increase in primary education enrolment, training facilities are being expanded by opening new training institutions.

The Basic Education Council headed by the Minister of Education is in charge of all basic education in the country, and one of its three main standing committees is the Teacher Education Supervision Committee, in charge of teacher education. The functions and duties of the Committee are (i) to revise and draw a suitable curriculum and syllabus for teacher preparation; (ii) to help realize the aims of teacher training institutions and schools; (iii) to produce and prescribe the textbooks for the training institutions; (iv) to improve the quality of teachers already in service; (v) to prescribe the minimum qualification of teachers; (vi) to evolve an effective method of teacher registration; (vii) to evolve teachers' code of ethics; (viii) to recommend to the Basic Education Council the opening of new training institutions for teachers; (ix) to improve the techniques of teacher preparation.

Since the academic year 1968-69, extensive changes have been made in teacher education to catch up with changes in basic education. Basic factors such as minimum educational

qualifications for admission, mode of recruitment, selection of trainees, the curriculum and syllabus of all teacher training institutions and the examination system have been changed.

Types, levels and duration. In 1970, there were eleven primary teacher training schools and three teacher training institutes.

Up to 1969-70, the primary teacher training schools offered a one-year course for primary teachers while the teacher training institutes provided a two-year course for junior assistant teachers. No recruitment of trainees for junior assistant teachers was made in the academic year 1970-71 as preparations for a new admission procedure for junior assistant teacherships were under way. Starting from the academic year 1971-72, only those who have at least three years of service with primary assistant teachership would be able to attend the junior assistant teachership course and the duration of the course will be one year.

Under the new system, the Institute of Education offers a five-year course leading to the B. Ed. degree while retaining one-year Dip. Ed. course for university graduates and one-year B. Ed. course as a transitionary measure for those who have Dip. Ed. The academic year 1966-67 saw the last batch of the old B. Ed. course and the year 1969-70 witnessed the last group of Dip. Ed. course. However, the Institute introduced B. Ed. correspondence course in 1968 and Dip. Ed. correspondence course in 1970. In addition to these courses a post-graduate course leading to the M. Ed. degree was started in 1970-71.

Admission and enrolment. The minimum educational qualification for primary teacher training is a pass in high school final examination after ten years of schooling. Selection was made by the District Education Supervision Committee from among those who had passed the entrance examination conducted by the Directorate of Education (Teacher Training Branch).

Till 1969-70, the trainees for junior assistant teachership were recruited from outsiders who had passed the Basic Education High School Examination conducted after 11 years of schooling. Selection was made by the Divisional Educational Supervision Committee from among those who had passed the Entrance examination conducted by the Directorate of Education (Teacher Training Branch). As stated earlier, starting from

the academic year 1971-72 only those in service who have primary assistant teachership certificate with at least three years' service will be recruited. The selection procedure will be the same as before. The only difference is that the grades gained according to the length of service will be added to the total grades.

The enrolment figures for the PAT and JAT in 1969-70 and 1970-71 were:

Year	PAT	JAT (1st Year)	JAT (2nd Year)
1969-70	1,745	547	953
1970-71	3,811	x	593

(Starting from 1971-72 the annual enrolment for PAT training will be 4,000, of which 25% will be from those in service. 600 will be selected for JAT training-all of them from those in service).

The enrolment figures for the Institute of Education were:

Class	1969-70	1970-71
1st year	397	407
2nd year	397	416
3rd year	354	393
4th year	373	349
5th year	314	372
B. Ed. (Correspondence)	421	463
Dip. Ed. (Correspondence)	-	321

Student aid. Education is free in vocational and teacher training institutions. 50% of the total number of trainees in all teacher training institutions are awarded Ks. 75/- (U.S. $18) per month as stipend. Those who have undertaken to serve in the remote areas after training are given special stipend. At the Institute of Education also a certain proportion of student-teachers are given stipends annually. Textbooks and necessary stationary are sold at concessional rates.

Facilities. Consequent on the change of medium of instruction to Burmese, there was till recently a dearth of textbooks for the teacher trainees. However, new textbooks and handbooks for teachers have been produced. Every teacher training institution has its own science laboratory and library. Necessary

equipment and facilities for physical education are given free in all institutes. Teacher trainees in all the training colleges and schools have free medical check-up by a medical officer twice a week.

Organization of instruction. The usual method of teaching has long been the lecture, though other methods of instruction are also being used. Every teacher training institution has a departmental organization. In colleges where there are no professors, lecturers are heads of the departments; and in training schools where there are no lecturers, assistant-lecturers are heads of the departments. The principal of every institution is responsible for both instruction and administration. All teacher training institutions are under the direct control of the Directorate of Education (Teacher Training Branch) and are supervised and inspected annually by the Assistant Director and Deputy Director of Education.

Curriculum. Up to the time of the promulgation of the Union of Burma Basic Education Law in 1966, the curriculum and syllabus used in both colleges and schools were those drawn up in 1958. In 1966, a co-ordinating meeting of all the principals of teacher training institutions in the country was held and modifications in the curriculum and syllabus were made. In 1968, a Curriculum and Syllabus Revision Committee for teacher training institutions was formed to review, revise and modify the curriculum. Based on the recommendations of the Committee, new curriculum and syllabuses were introduced in all teacher training institutions in 1968, and these are currently in operation. Subjects in the curriculum of teacher training for junior assistant teachers and primary assistant teachers (1970-71) are as follows:

Subject of study in teacher training curriculum

Junior assistant teachers (Ordinary) (The period of training is two years)	Primary assistant teachers (The period of training is one year)
I. Educational theory and practice and educational psychology	I. Educational theory and practice and educational psychology

II. Methodology

1. Teaching of Burmese
2. Teaching of English
3. Teaching of mathematics
4. Teaching of history
5. Teaching of geography
6. Teaching of general science

II. Methodology

1. Teaching of Burmese
2. Teaching of environmental studies
3. Teaching of arithmetic
4. Teaching of geography
5. Teaching of history
6. Teaching of basic science

III. Political science

III. Political science

IV. Co-curricular activities

1. Physical training
2. Agriculture
3. Industrial arts (Men)
4. Home economics (Women)
5. Music
6. Art

IV. Co-curricular activities

1. Physical training
2. Agriculture
3. Industrial arts (Men)
4. Home economics (Women)
5. Music
6. Art

Note: Physical training including basic military training is compulsory for all trainees and is taken for at least one hour a day in the morning.

Junior assistant teachers (Special)
(The period of training is two years)

I. Educational theory and practice and educational psychology
(Same syllabus as in JAT (Ordinary) course)

II. Methodology

1. Teaching of Burmese
2. Teaching of mathematics
3. Teaching of general science
4. Teaching of specialized subject (industrial arts or agriculture)

III. Political science
(Same as in JAT (Ordinary))

IV. Co-curricular activities
(Same as in JAT (Ordinary))

Note: Those who specialize in industrial arts or agriculture are appointed as special teachers (industrial arts or agriculture) in the State schools.

Starting from the academic year 1971-72 some changes will be made in the junior assistant teacher's course. The course will be one year and all trainees are recruited from teachers in service. According to the new curriculum and syllabus there will be science and arts streams. Educational subjects will be the same as before. Teaching of Burmese, Teaching of English, and political science will be compulsory subjects for both streams. Arts stream trainees have to specialize in the teaching of history and the teaching of geography, while science stream trainees have to specialize in the teaching of mathematics and the teaching of general science. Moreover they have to study the contents of their "stream" subjects at an advanced level.

The curriculum of the B. Ed. course of the Institute of Education includes the following:

Subjects of B. Ed. course (5-year course)

1. Burmese
2. English
3. Political science
4. Education subjects
5. Methodology plus subject content (one combination has to be selected)

A	B	C
1. Economics	1. Geography	1. Physics
2. Geography	2. History	2. Chemistry
3. History/mathematics	3. Chemistry	3. Mathematics/biology

Note: Emphasis is given on subject contents in the first three years while educational subjects have emphasis in the last two years. In the final year students are required to submit a thesis.

6. Basic military training is compulsory for all trainees

7. Co-curricular activities:

1. Physical training)
2. School health and hygiene) compulsory for all
3. Home economics (women))
4. Every student has to join any one of the following clubs of his choice:

a) Gardening
b) Music and dancing
c) Hiking and mountaineering
d) Judo and self defence
e) Red Cross
f) Sports and games
g) Art
h) Domestic science

Student teaching. All teacher training institutions have laboratory schools attached to them. Apart from being used for practice teaching, the laboratory schools are also used for experimental studies and research. Though it was believed that the practical experience of student-teachers in training institutions should not be confined to laboratory or practising schools, but should also embrace experience in ordinary schools where they can meet all the problems in the school and its environment, not until 1968-69 was due emphasis given to practice teaching. Teaching practice was given in some local ordinary schools, but the time allotted for practice teaching was very short.

According to the new curriculum, fifteen days are allotted for demonstration lessons and practice teaching in the attached practising school and the actual practice teaching in ordinary State schools is now one month in an academic year, i.e. about 10 % of the total number of school days. During their practice teaching time, student-teachers are treated as full members of the teaching staff and are expected to take part in all daily activities of the school, under the guidance and supervision of well-qualified teachers of the schools. The student-teachers have to submit their lesson-plans to the lecturers of the institutes and get their approval before going for practice teaching. They have to make their own teaching aids and materials for practice teaching. The final assessment is made by the lecturers who visit the schools during the practice teaching period from time to time, with the help of the teachers of the school who are with the student-teachers the whole period of practice teaching. Student-teachers who do not gain satisfactory

grades in practice teaching are not eligible for the teachership certificate. They have to undergo practice teaching in the next year or again until their achievements are graded satisfactory.

The B. Ed. students also have to undergo practice teaching for one month in ordinary schools.

Evaluation. Up to the academic year 1967-68, all teacher training institutions were free to conduct their own examinations and to assess the answer scripts by their own teaching staff, so long as the assessment was in line with the instructions issued by the Directorate of Education. As regards co-curricular activities, no assessment was made. Since the academic year 1968-69 the methods and the procedures for evaluation have changed. Theoretical subjects are now assessed externally while practice teaching is internally evaluated. Co-curricular activities are assessed and evaluated throughout the year by the lecturers concerned based on the procedure laid down by the Directorate of Education. Co-curricular activities are not examination subjects, but the gradings on each activity are mentioned in the teachership certificate.

Teacher educators

All teacher educators must have at least a B. Ed. degree with at least three years of teaching service in State high schools. The staff are recruited from the senior teachers and the principals of high schools by the Boards formed by the Ministry of Education. The first Board deals with appointments, transfers etc. of the principals and lecturers of the State teacher training colleges and schools, whereas the second Board deals with cases of the assistant lecturers of all teacher training institutions. Their duties and functions are mentioned in "The Aims and Functions of Teacher Training Institutions" as follows:

1. to train and produce full fledged teachers who are pledged to carry out their duties and responsibilities in accordance with the Burmese Way to Socialism in the construction of the new education system;
2. to train and turn out teachers who can behave and conduct themselves well to become good Achariyas (Teachers) in conformity with the Burmese way of life;

3. to train and produce competent teachers well-versed in subjects which they are held responsible to teach;

4. to produce teachers who possess adequate knowledge of educational principles and teaching techniques which will enable them not only to teach effectively but also to promote wholesome relations between the pupils and their homes, school and community;

5. to train and produce teachers who can assume leadership possessing a thorough knowledge and understanding of the principles of all-round harmonious development of human personality in education;

6. to turn out teachers who can be trusted and respected by parents and working people of their community;

7. to engage in research work that would contribute to widen the horizon of the knowledge of teachers, improve their teaching techniques and raise their intellectual and professional level.

In 1970, the teaching staff of the Institute of Education comprised 3 professors, 11 lecturers, 33 assistant lecturers, 75 tutors and demonstrators. In the academic year 1970-71, the three teacher training colleges had altogether 33 lecturers, 72 assistant lecturers and 13 tutors and instructors besides the principals. The 11 teacher training schools had 73 assistant lecturers and 63 tutors and instructors besides the principals.

In-service education

Opportunities have been provided for the further education of the teachers in service. The Workers' College at Rangoon and the evening classes of the Mandalay Arts and Science University provide study facilities to undergraduate junior and primary assistant teachers to become university graduates. B. Ed. and Dip. Ed. correspondence courses for the uncertificated graduate teachers in service are conducted by the Institute of Education in co-operation with the Directorate of Education. There are also other facilities for in-service education. Teachers in service who are selected for further education are given a monthly stipend of Ks. 75/- and their training period is counted as service.

Survey of teacher education

To update the knowledge and skills of teachers, summer courses for all levels of teachers are conducted annually by the Directorate of Education (Training Branch) in collaboration with the Rangoon Arts and Science University, the Mandalay Arts and Science University, the Institute of Education, the Institute of Economics and the State teacher training institutions. During the summer of 1970 a total of 750 senior science teachers, 400 primary Burmese teachers, 3,220 junior history teachers, 700 senior geography teachers and 600 junior physical education teachers were given intensive reorientation and refresher courses in connection with the changed syllabuses in basic education. Arrangements have been made to retrain all teachers teaching first and second year English in schools, in the summer of 1971, as the new method of teaching English will be introduced in the first two years of the lower secondary level in the academic year 1971-72. Reorientation courses for junior geography teachers and junior physical education teachers will be held during the summer of 1971.

To widen the horizon of the knowledge of teachers and teacher educators at all levels, a magazine named Pyinnya-Lawka (The World of Education) has been published by the Ministry of Education in collaboration with the Ministry of Information since January 1970. Monthly discussions are held by the teachers and teacher educators on selected articles, papers, reports etc., which appear in education magazines. Their discussion reports are sent to the education officers and to educational institutions.

The education of teachers at all levels is promoted through the Curriculum Development Committees of each school and of the region. Subject-wise Curriculum Development Committees are formed in every school and in every region. They discuss regularly the syllabus, the teaching methods and the new knowledge to be added to the contents of the subjects. They are motivated to do so with more than theoretical interest as they have the right to give suggestions in connection with the syllabus and the curriculum to the Curriculum, Syllabus and Textbook Main Committee.

Research

One of the aims and functions of teacher training institutions is "to engage in research work that would contribute to

widen the horizon of the knowledge of teachers, improve their teaching techniques and raise their intellectual and professional level." To fulfil this aim teacher educators of all teacher training institutions make general surveys of the teaching methods practised in schools with a view to evolving better teaching methods. Professors and lecturers of the Institute of Education and teacher educators of the teacher training institutions take part in the dissemination of research by reading papers on research projects in education or by joining discussions in the Research Congress held annually.

CEYLON

Teacher education

A Central School Commission established in 1841 formulated the first educational policy of the government in which the training of teachers was stressed. The first normal classes in Ceylon were started in the same year for the training of English-medium teachers, and a few years later vernacular teachers also began to be trained in the same institution. By 1867, training schools for vernacular teachers were started by some missionary societies. A Department of Public Instruction was set up in 1869. It encouraged private missions to open training colleges by initiating a scheme of grants. By 1931, there were 19 Sinhala and Tamil training schools. Training colleges were also opened by the government. In 1942, the first normal schools providing a three-year course of study was started. A Department of Education was started in the University of Ceylon in 1949 for the training of graduates. In 1949, a separate college training branch was established in the Ministry. By 1953, there were six institutions training teachers for secondary schools. Two-year specialized training courses in sciences, mathematics, English, etc. were started in the government training college in Maharagama and at Palâly. In 1960, all training colleges were taken over by the government. In 1966, the Director of Education came to be in charge of teacher education. More training colleges were started beginning 1967; so that in the middle of 1970 there were 25 teachers' colleges.[1]

Text based on response to the Institute's Questionnaire through the courtesy of the Ministry of Education (Ceylon) supplemented by information from other documents. The text was in the press already when extensive reorganization of the Ceylon education system was recently announced, and does not therefore incorporate the new proposals for reorganization.

1. Two more colleges for primary general teacher training have since been opened.

Management, control and financing. All teachers' colleges are government institutions now and are directly under a Deputy Director-General of Education who has delegated authority to a Director of Education who heads the Teachers' Colleges Branch of the Ministry of Education. The day-to-day administration and supervision of each teachers' college is done by its principal, assisted by a vice-principal in many cases.

In the universities, teacher education is a function of the Departments of Education established within the Arts Faculties of the universities. Curricula and examination standards are determined by the Senates of the universities.[2]

The teachers in the elementary schools fall into three broad categories: (1) trained, (2) certificated and (3) uncertificated. Within each of these categories there are several sub-categories. The basic academic qualification for all three categories is General Certificate of Education (Ordinary Level), or the Senior School Certificate. The teacher who successfully undergoes a residential course of training for two years in a training college is a trained teacher. The training is open to both men and women, but admission to a training college is restricted to teachers under 45 years of age. No one is normally admitted unless he is already in service as a teacher. A person could become a certificated teacher by passing written examinations in Principles of Teaching, Psychology, Methods of Teaching and certain academic subjects and a practical test in teaching conducted by a Board of Examiners appointed for the purpose. The third category - uncertificated teachers - through at first not a large percentage, now constitutes a considerable part of the teaching cadre and includes the teachers of English and Sciences in the elementary schools.

A decision taken in 1963 was the establishment of a cadre of "pupil teachers," initially fixed at 10,000 and subsequently raised to 15,000, and thereafter lowered to 12,000. The minimum qualifications for entry to the grade is the G.C.E. 'O' level or equivalent, and recruitment is through competitive

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2. Teacher education in the universities is undergoing change in the new Reorganization Scheme.

examination. The teachers receive appointment for a period of four years, during which time they are required either to obtain a Teacher's Certificate by passing appropriate examinations, or gain entrance to a training college through the competitive examination held annually.

Training institutions for primary teachers are financed entirely by the government. A nominal facilities fee is charged from students which is used entirely for students' welfare. No tuition fee is charged. Institutions for lower secondary teacher training are also government institutions and all the expenses are met by the government. The trainees are paid as they are supposed to be on full pay leave. The financing of these institutions is thus a government responsibility.

Types, levels and duration. The Ministry of Education has under it (as of 1970) 25 teachers' colleges established in different parts of the country which provide two-year courses of teacher education. Twenty-two of the colleges are classified as non-specialist teachers' colleges, and three as specialist teachers' colleges. The latter turn out specialist teachers of English, mathematics, science, commerce, handicrafts, physical education, agriculture and home science, while the former teachers' colleges turn out teachers of the general subjects included in the school curriculum. The non-specialist teachers are licensed to teach grades I to VII while the specialist teachers are normally to teach grades VIII to V, but may teach even to grade XII in the absence of university graduates for teaching the particular subjects. More teachers' colleges of the non-specialist type have been proposed to be started immediately to meet the emergent need for trained teachers.

In one or two of the non-specialist teachers' colleges, a one-year course is conducted for the teachers who possess the Untrained Teachers' Certificate I or II class (which is generally taken by teachers with more or less ten years of service by passing certain tests).

Of the 25 teachers' colleges, five are co-educational, 13 admit only men and 7 admit only women. These include the three specialist teachers' colleges which are all co-educational.

Three of the four universities in Ceylon provide courses in teacher education. At two of the universities, namely the University of Ceylon, Peradeniya, and the Vidyodaya University

of Ceylon, courses are provided for the degree of Bachelor of Education as well as for the Diploma in Education, while at the Vidyalankara University of Ceylon a course is provided for the Bachelor in Education, which is of four years' duration; at Vidyodaya University it is of four years' duration for those who do not hold a university degree, while it can be taken in two years by those who hold a university degree.

Admission and enrolment. Admission to the two-year courses in the teachers' colleges, primary and specialist, leading to the Trained Teachers' Certificate, is given to those who have passed the General Certificate of Education (Ordinary Level) examination in a minimum of six subjects and have subsequently been selected as teachers on the basis of a competitive examination.

In order to read for the four-year course leading to the Bachelor of Education degree, students should have first qualified for admission to the university, the usual requirement for admission being passes in three or four subjects at the General Certificate of Education (Advanced Level) examination; and at the end of the first year of study, they should pass the general arts qualifying examination or the general science qualifying examination. The Diploma in Education course is of one year's duration and is a post-graduate course for teachers who have taken a university degree and have also had at least five years' teaching experience.

The minimum qualifications for admission to each type of course are as follows:

a) For M. A. (Ed.) course: Diploma in Education of a recognized university with merit pass, or a pass in an M. A. qualifying examination. Selection is done by the University Department of Education.

b) For Diploma in Education course: B. A. or B. Sc. degree with five years' teaching experience and a selection test by the University Department of Education.

c) For B. Ed. course: A good pass in at least three subjects at the G. C. E. (Advanced Level). Selection is done by the University. At the end of the first year, they should pass in general arts or general science qualifying examinations.

d) Specialist trained teachers' course: A pass in the S.S.C. or a pass in six subjects at the G.C.E. (Ordinary Level) including first language and arithmetic or mathematics, secured at not more than two sittings; and a certain number of credit passes in the subjects in which the candidates wish to specialize. Selection is made through an entrance examination (written) and an interview by the Directorate of Teacher Education conducted by the Departement of Examinations.

e) Non-specialist traiping course: Same qualifications as for specialist training courses except that credit passes are not essential. Entrance examination and interview conducted, as in the former case.

Those who after ten years' schooling enter the teaching profession and obtain while in service a First or Second Class Certificate in Teaching (Untrained) on the basis of an academic test, need take only one-year training. The written tests used in the battery of selection tests, and their duration is given below:

1) Scholastic achievement test - language and arithmetic (90 minutes);

2) General knowledge test - history, geography, civics, science and current affairs (30 minutes);

3) General intelligence test - verbal and numerical ability and reasoning (30 minutes).

The tests are locally prepared.

An interview and a physical and medical examination are required of all entrants.

The maximum age for admission to a teacher training institution is 45 years. The optional retiring age for teachers in Ceylon is 55 and the teacher has to enter into a bond to serve for at least eight years after training when he enters the training institutions.

The number of students enrolled in three consecutive years 1966, 1967 and 1968 and the number of those who graduated in three consecutive years (1964, 1965 and 1966) are given in Tables 1 and 2. Greater enrolment for both primary and

secondary teacher training is envisaged. The enrolment in 1969 was 3,800 and it is proposed to raise it to 6,000 as early as possible. It is evident from Table 2 that the supply of trained teachers is inadequate to meet the country's needs. About 39 % of the teachers alone are trained so far.

Table 1. Number of students enrolled in the last three consecutive years

Type of teacher training institutions	Number of students enrolled 1966			1967			1968		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	1 290	575	1 865	1 470	714	2184	1 395	737	2132
Secondary teacher training (university level)			50			51			75
Primary and lower secondary teacher training									
a) Primary teacher training	51	44	95	84	30	114	55	48	103
b) Specialist course	353	296	649	348	331	679	343	298	641

Table 2. Number of students graduated in the last three consecutive years

Type of teacher training institutions	Number of students enrolled 1964			1965			1966		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	1 330	584	1 914	1 284	749	2 033	1 425	621	2 046
Secondary teacher training (university level)									
Primary and lower secondary teacher training									
a) Primary teacher training							51	27	78
b) Specialist course	312	183	495	278	186	464			

Number of students enrolled in the last three consecutive years in university departments

	1967	1968	1969
University departments			
B. Ed. course	46	56	84
Diploma course	107	107	146

Student aid. Teachers are now recruited to government service at two levels - at the student-teachers level through the student-teachers examination, and at the university graduate level through advertisement, according to the needs of the schools. More than 1,000 teachers are recruited every year through the entrance examination held for admission to the specialist teachers' colleges. An allowance of Rs. 100 is paid to all pupil-teachers and their conditions of service stipulate that they should enter a teachers' college or be successful at the teachers' certificate examination before the lapse of four years from the date of appointment. A considerable number of teachers with G.C.E. Advanced level qualification, and even university graduates join as student-teachers through this examination. About 85 % of the number entering training colleges are student-teachers.

Facilities. All colleges are residential. The majority of teachers' colleges are fairly well equipped except a few which were taken over by the government recently. Library and reading room facilities in the majority of teachers' colleges may be considered inadequate, especially as there are very few books in the national languages for the use of teachers. In at least three of the specialist colleges, satisfactory libraries have been built up, but there is shortage of qualified librarians. Some of the non-specialist teachers' colleges and all of the specialist teachers' colleges have reasonably well-equipped laboratories.

About half of the colleges have film projectors, tape recorders, filmstrip projectors and radio-receivers, and there is a language laboratory in one of the specialist colleges. Very few of the teachers' colleges have sufficiently large playgrounds and no non-specialist teachers' college has a gymnasium.

Organization of instruction. The class size ranges between 30-40 in the primary teacher training institutions and is between 30-50 in the secondary teacher training institutions. However, till 1959 classes were somewhat large (50-100) in institutions without sufficient accommodation and staff. Particularly in such institutions, the lecture method predominated. Now small tutorial groups are formed for assignment work and school practice. Lecture work has considerably been reduced. Working on assignments is catching up rapidly.

All senior and experienced lecturers are assigned tutorial groups (with about 20 students in each group). These tutorial groups meet once every day and discuss their problems and problems of school practice and assignment work with their tutors.

Teachers are all full-time and carry a teaching load of 20 hours, which is the maximum, except those who have administrative duties whose teaching load is approximately 8 hours. Primary teacher training institutions are not organized departmentally, but the education departments in the universities have academic devisions within them.

Curriculum

Specialist teachers' course

(a) Common core subjects: Principles of education including general methods; educational psychology including elements of educational guidance; health and physical education; first language (mother tongue); general English (except for course in English); religion.

(b) Academic (specializing subjects): One group to be selected from the following:

i) English language and literature course (including methods of teaching English as a second language);

ii) Science course: Any two of physical chemistry, botany, zoology;

iii) Mathematics course: Pure mathematics and applied mathematics;

iv) Commerce: Accountancy, commerce, finance, economics;

v) Handicrafts: Geometrical drawing, woodwork, metal work, weaving, pottery, leather work, embroidery;

vi) Methods of teaching the selected group.

General training course

a) Two-year course

i) Common core subjects: Educational psychology including child development and educational guidance (Education I); Principles of education including general methods, school administration and organization and comparative education (Education II); first language; health and physical education including P. T.; religion; agricultural science (for men) and home science (for women), including practicals; mathematics; general science; English; art, music, dancing, handwork (all four subjects - practicals only); environmental studies and social studies.

ii) Optionals: A candidate may offer any one of the following subjects: history, geography, civics, mathematics, general science, English, art, music, dancing, agriculture, home science, P. T., handicrafts. Every optional subject includes subject matter and methods of teaching.

iii) School practice

b) One-year course (for first-class uncertificated teachers). A rapid course on the general syllabus of the two-year course has been organized for the one-year training course. Subjects like health and physical education, agriculture/home science, mathematics, general science, art, music, dancing, handwork are not given much weightage. (Student teaching also is not stressed in this course). These trainees are being trained in two of the general training colleges with those who follow the two-year general course.

Bachelor of Education course. The course for the degree of Bachelor of Education consists of academic studies in various subject fields and professional studies in principles of education, educational psychology, comparative education, methodology, etc.

Student teaching. This phase of the curriculum is known as "School Practice." Almost the same practice is being followed in all three types of teachers' colleges. Every trainee was expected, till 1969, to do at least 60 hours of supervised teaching during the two-year course of training. It was generally laid down that all lesson plans have to be approved by the subject lecturer/tutor before the lessons are taught. The trainees were to do their teaching practice in the laboratory school attached to the teachers' college and in suitable schools in the neighbourhood. Each tutor was to be in charge of 10-15 trainees during teaching practice.

In 1970, a system of affiliated schools was introduced. "Criticism lessons" and their observation by groups of trainees and lecturers, and discussions thereof, as well as demonstration lessons taught by bright students or subject lecturers are now included in school practice. School practice is allocated a minimum of ten hours per two weeks and continues throughout the two years. Practical experiences included are (1) teaching pre-planned lessons; (2) functioning as teacher-aid; (3) micro-teaching experiences; (4) co-curricular activities and observation of studies of children; and (5) assignments - each student is expected to work on a certain number of assignments and submit reports during the course (a minimum of one a term) of training. These reports are assessed by the subject lecturer/tutor.

Evaluation. Until 1969, teaching practice, criticism lessons, work-assignments, etc. were assessed and terminal examinations were held in subjects. The last test in the first year was considered the "semi-final" test. This was an internal examination. The final examination at the end of the two-year course was conducted in all subjects by the Department of Examinations. This was a common "external examination" for all teachers' colleges. The final examination in student teaching alone was conducted internally. If the performance at the final examination was not satisfactory, the term-test grades were taken into consideration. Those who failed or were "referred" at the final examination were to complete the examination at one or more subsequent sittings within a period of five years immediately following the final examination in which they failed or were referred.

Survey of teacher education

Since 1970 continuous assessment of school practice, assignments and theoretical studies has been introduced. All terminal tests are conducted by the college and the external examination by the Department is only in core subjects.

Teacher educators

Qualifications. Principals of primary general and specialist teacher training institutions are required to have a university degree, post-graduate diploma in education and ten years of teaching experience. Lecturers may be G.C.E. 'O' level or S.S.C. or London Matriculation graduates, with Specialist Teachers' Certificate and five years' teaching experience in the case of trained teachers but only three years of experience in the case of graduates whether trained or untrained. It is hoped that, gradually, an M. A. in Education will become the qualification for recruitment.

Recruitment. Recruitment procedures involve advertisement and selection by interview of the best qualified and most experienced teachers. The teachers' colleges are staffed by a few who have obtained higher degrees in education, some who have obtained diplomas in education, and some who have obtained trained teachers' certificates, with or without university degrees.

The teaching staff of the Departments of Education of universities by and large consist of persons who have been school teachers at some time or other and have further followed professional courses in education, obtaining post-graduate diplomas and higher degrees in education.

Staff gradations and duties. In institutions for primary teacher training, the principal is generally assisted by a vice-principal and "training masters". University departments have professors and lecturers. The training masters have no administrative duties. They share with teachers of the higher cadres all teaching work and supervision of school practice, take tutorials and help the students in carrying out their assignment work. They also evaluate work in subject courses and school practice.

Teachers welfare. The initial pay of teachers in the training institutions is based on their qualifications and teaching

experience. Increments are given when qualifications are improved. Members of the staff institutions for the secondary and specialist teacher training institutions are on a higher scale of pay than those in the institutions for primary teacher training. Teacher educators of institutions for primary teacher training are paid salaries depending on qualifications - according to whether they are graduates or trained graduates. Specialist trained teachers are paid the same salaries as graduates in the institutions to primary teacher training. Salary increments are given automatically and on a yearly basis. The salaries have been increased several times since 1928 and more posts in higher grades, like super-grade and grade I, created for principals. About half of the 25 teachers' colleges have residential accommodation for the principals and a lesser number provide for the vice-principals. Residential accommodation is provided for some lecturers in a few of the teachers' colleges.

In-service training

There is no regular and well-defined programme of in-service training in any of the teachers' colleges in Ceylon yet.

A few in-service training courses for teachers in the form of "refresher courses", seminars and short vacation courses are conducted during the school vacations, depending on the availability of funds for such ventures. Week-end courses are also held. All such courses are organized by the Curriculum Division of the Education Department. The following courses are typical: (a) teaching of English as a second language; (b) teaching of science and mathematics; (c) teaching of music, art and dancing; (d) sports and P. T. camps for P. T. instructors; (e) teaching of religion.

It is realized that a two-year training course cannot make a teacher fully qualified to teach, but the more pressing problem is to clear up the backlog of untrained teachers and hence, in various school subjects, refresher courses for untrained teachers are organized by the Ministry of Education. Course guides giving detailed instruction and aids in teaching are also being prepared by panels of experienced teachers. The contents of the syllabus are arranged into suitable units, and in each lesson unit the teaching sequences and the aids to be prepared

by the teachers are indicated. Full-pay study leave is given to teachers for attending training colleges and universities. They are also entitled to full-pay leave for study abroad. Foreign scholarships are also available to the deserving, though they are few.

A Teacher Educators Institute has been organized in the Ministry since 1969 which functions under a Director of the Institute with a few Education Officers. Its work at present is primarily to improve the curriculum of teacher training institutions and of primary schools through seminars of teacher educators. An in-service education programme for the untrained teachers for upgrading their content and professional knowledge has also been planned.

Research

Some simple research exercises are carried out by the teacher-trainees, under the guidance and supervision of their tutors. Many of them are confined to the laboratory schools attached to the teachers' colleges. The research projects carried out here take the form of trying out new techniques and devices in teaching and assessing their results. "Free work" - a case study or a survey of health, economic and educational or cultural development of selected villages in close proximity to the teachers' colleges or in the students' home stations - was carried out until 1969. A great drawback in the execution of worthwhile research projects in these institutions is lack of trained personnel in research methods and techniques.

REPUBLIC OF CHINA

Education system

Present structure and organization. The prevailing school system consists of four levels, namely, pre-school education, primary education, secondary education and higher education. Pre-schools are primarily kindergarten schools admitting children of four to six years of age. Since 1968 the duration of primary education has been extended to 9 years to include education in the three-year junior high school. Secondary education includes three types of school: academic secondary school, vocational school and normal school. Academic secondary schools may have the junior high school section along with senior high school of three years, or may be set up separately. Vocational schools also have a junior school of three years and a senior school of three years, though in some cases these may be of four or five years' duration. They are all gradually being transformed into senior vocational schools, following the extension of primary education to nine years. Junior colleges for high school graduates are also established for certain applied sciences which have a duration of two to three years.

University education is provided for a period of four to seven years. While a four-year college course leads to a first degree in many areas, in some professional areas like medicine, the period extends to 7 years. Graduate schools offer two-year programmes for the Master's degree in most subjects, and require two additional years for a doctoral programme.

Teacher education

Management, control and financing. Teacher education for elementary schools at the national level is under the supervision of the Department of Technical and Vocational Education

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Text based on response to the Institute's questionnaire through the courtesy of the Ministry of Education (Republic of China) supplemented by information culled from other documents.

and at the provincial level under the Department of Public Elementary Education. Teacher education for the secondary schools at the two levels is under the supervision of the Department of Higher Education and the Department of Secondary Education of the Ministry of Education. In the province, the Department of Education is directly in charge of the provincial teachers' colleges. In Taipei City, the Taipei City Education Bureau is in charge of the Taipei Municipal Teachers' College for Women. The National Normal University is under the supervision of the Ministry of Education. The presidents of the teachers' colleges and of the Taipei City Women's College are appointed by the Provincial Department of Education and the Taipei City Education Bureau respectively on the basis of their academic qualifications and administrative experience. The teachers in the institutions are employed by their presidents.

There are no definite or regulated procedures of supervision in elementary and secondary teacher education except the regular administrative supervision. Policy is made by the Ministry of Education in the light of the national policy of the central government prepared by its policy-making committee. Provincial policy is made on the basis of the national policy. In terms of administration, the higher rank of organization has authority of direction and control over the lower rank.

All components of the public school system are financed by the government, either national or local. There is no private teacher training institution in the country.

Types, levels and duration. There are at present 9 junior teachers' colleges for primary teacher training including the Taipei Municipal Teachers' College for women, and for secondary teacher training, two colleges and one department of a university. One is in the south-east, two in the north, two in the south, and three in the east. Thus the colleges are well distributed. Those in the north-east, south-west, and the south serve mostly the rural areas.

Apart from the National Taiwan University, the other institutions that train secondary teachers are the Provincial Kaohsiung Normal College, and the Department of Agricultural Education, National Chung Hsing University. In order to meet the need of junior high school teachers for the nine-year free

education programme, the Ministry of Education has requested the National Taiwan University, the National Cheng Chi University, the National Chung Hsing University, and the National Cheng Kung University to set up optional courses in education (education minor) for those students interested in a teaching career. Those who have taken 16 credits in educational courses, and one-year full-time practice will be qualified as teachers (teachers-in-reserve).

At the end of both the five-year or the two-year primary teacher training the students can get a certificate qualifying them for primary school teaching. Graduates of the five-year secondary teacher training get B.S.E. degree. The previous schooling needed is 12 years which is made up of 6 years of elementary and 6 years of secondary schooling. The training period is proposed to be four years at college level for elementary as well as secondary teacher training in the near future.

Admission and enrolment. Candidates for training are admitted on the basis of the certificate for academic work and a certificate of good character from the school wherefrom they graduated, for both primary and secondary teacher training programmes. An interview is held to assess attitude, interests, character, appearance, speech habits, etc. An admission test is also given. The battery of selection tests used in the written examination are locally prepared, and include scholastic achievement tests in the Chinese language, social studies, civics, mathematics and natural science (80 minutes per subtest). A physical and medical examination is also held. The candidates are usually between 20 and 25 years at time of entry in the secondary teacher training and between 15, and 20 when they enter institutions for elementary teacher training.

Of the institutions for primary teacher training, one has an enrolment of 300-500, four have an enrolment of 500-1,000 and four have an enrolment of over a thousand. One training college for secondary teacher training has less than 300, one has between 1,000-2,000, and the biggest has over 3,000. The number of students enrolled for three consecutive years from 1968 and the number of students who graduated in the three consecutive years beginning 1967 from institutions for primary and secondary teacher training are given in Tables 1 and 2. The supply of teachers at elementary school level is enough to meet the country's need.

Survey of teacher education

Table 1. Number of students enrolled in the last three consecutive years

Type of teacher training institutions	Number of students enrolled								
	1968			1969			1970		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	3 792	3 535	7 327	4 031	4 453	8 484	4 090	5 379	9 469
Secondary teacher training	3 982	3 874	7 856	4 149	4 287	8 436	4 527	4 958	9 385

Table 2. Number of students graduated in the last three consecutive years

Type of teacher training institutions	Number of students graduated								
	1967			1968			1969		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	621	594	1 215	516	744	1 260	676	744	1 420
Secondary teacher training	1 490	1116	2 606	1 207	897	2 104	1 341	1 198	2 539

Student aid. In addition to free tuition, boarding, lodging, books and clothes (only one suit a year), there are many kinds of scholarships given by the school or by some organizations outside the school. The amount of scholarship varies from five to twenty-five US dollars. About 10 % of the students are able to get scholarship.

Facilities. There are no definite regulations regarding space to be provided for a training institution. However, in general, large campuses and buildings are provided for the purpose. They have libraries, laboratories for physics, chemistry and biology, classrooms, workshops, auditoriums, swimming pools, dining halls and sports grounds. They have separate rooms for audio-visual, music, Reserve Officers' Training Corps (R.O.T.C.) rooms, cooking and sewing, dormitories for the faculty and students, and houses for labourers and janitors. Some of the institutions have also Students' Centres, Teaching Resource Centres, Study Halls, Coffee Rooms etc. Equipment is adequate in terms of the number of students admitted. There are, however, no organized curriculum laboratories, language laboratories and research centres, in institutions for primary teacher training. The National Taiwan University has a language laboratory, a psychology study centre and an in-service education centre for secondary school teachers.

Various clubs to serve students' interests have been organized by students in every institution according to their own choice, and staff members are invited to serve as advisers. Occasionally, some resource persons from outside the school are also invited to teach the students some activities, with pay.

Organization of instruction. The average size of a class in the institutions for primary teacher training is 45 while that in a college for secondary teacher training which takes more than 3,000 students is 35. The staff-student ratio in the institutions for primary teacher training on an average, is 1:11 while that in the institutions for secondary teacher training is 1:9.

Only members of the teaching staff are allowed to teach. There is no interchange of staff. All members of the teaching staff are employed every school year; the administrative staff are employed for life. Some of the librarians, registrars, and heads of institutions serve part-time in their jobs and are permitted to do part-time lecturing. The librarian of the university works full-time and does not do any lecturing work. A professor does eight to eleven hours and an instructor, ten to twelve hours of work, if they are full-time employees. Those with administrative or supervisory duties teach for about four hours a week.

The five-year normal junior colleges are not organized into academic departments. A choice of 20 credits in any one of the specialized areas (science and mathematics, music, Chinese, history and geography, arts and crafts, etc.) is required of each student. The education departments of the university and the teacher training institutions for secondary teachers have departments for Education, Social Education, Industrial Education, Health Education and Physical Education.

Lecture and lecture-discussion are the methods often used in teaching the theory courses. Lecture, lecture-discussion, observation and practice teaching are the methods used in teaching method courses.

Curriculum. The primary teacher training programme includes the following subjects (the number of hours devoted to each is indicated in parenthesis):

A. Professional education - introduction to education (4), child development and guidance (4), educational psychology (6), educational sociology (2), introduction to teaching materials and methods (4), educational statistics and measurement (4), elementary school administration (4), history of education (4), audio-visual education (2), health education (2), teaching studies and practice (1-2), and many selective courses (12-24).

B. General education - Dr. Sun Yat-sen's Thought (4), Chinese (52), Mandarin (4), mathematics (18), civics and morals (8), history (12), geography (8), natural history (8), chemistry (8), music (12), crafts (12), and physical education (10).

The curriculum for secondary teacher training includes the following general required courses (their equivalent credits are indicated in parenthesis): Dr. Sun Yat-sen's Thought (4), Chinese (8), English (8), introduction to education (4), psychology (6), general methods of teaching (2), practice teaching (12) - including 6 in practice teaching, 6 in internship - Four Books, Chinese phonetics (military training (R.O.T.C.) P.E. (6), and any of the following courses, with 5-8 credits: International organization and international relationship, modern history of China or general history of China, logic, general introduction to humanities or ethics or philosophy, constitution, general introduction to social sciences, general introduction to natural sciences.

In addition to the foregoing required courses, the following are also offered: sociology (3), study of human physiology (3), educational psychology (6), educational statistics (4), history of western education (4), fundamental education (3), selected readings of educational classics (6), secondary education (6), principles and practices of discipline (3), history of Chinese education (4), principles of teaching (3), educational and mental measurement (4), educational administration (3), teaching methods and materials (6), philosophy of education (4), and comparative education (4).

The specific electives include educational biology (3), audio-visual education (2), logic (3), politics in education (3), economics in education (3), second foreign language (10), educational sociology (3), pre-primary education (2), mental hygiene (3), educational planning (3), vocational education (3), principles of guidance (3), school administration (3), history of Chinese philosophy (3), teacher education (3), co-curricular activity (3), comparative educational administration (3), history of western philosophy (3), educational epistomology (3), educational supervision (3), methods of educational research (3), modern history of Chinese education (3), higher education (3), curriculum (3), practical problems in Chinese education (3), modern history of western education (3), and special education (3). The students may choose one or two courses each semester.

The curriculum is planned by experts and is applicable for the whole country. As to specializations, there is provision

for study in both major and minor fields, depending upon the students' own choice. Each field has specific objectives which are listed in its syllabuses.

Student teaching. All the required courses should be passed. At least 144 credits for secondary teacher training, and 242 credits for primary teacher training must be acquired before one can participate in practice teaching.

Student-teachers should also have been trained in the basic skills before they start their practice teaching. Such basic skills as chalkboard writing, mimeographing and carbon-paper-writing, child-story-telling, child dancing and singing, and so on are required of a primary school teacher.

Every teacher training institution including the normal university has a laboratory school (attached practising school). In addition it may have three or four co-operating schools in its neighbourhood which are accessible to the student-teachers on foot or by bus. The time spent on student teaching is divided equally between the attached practising school and the co-operating school. The student teaching programmes vary from college to college.

For practice teaching the students are organized in the same way as their ordinary class under the leadership of the teacher or supervisor who has taught them practice teaching. In general, the student-teachers take Observation first in the laboratory school and then take Practice Teaching in the same school, and continue in the co-operating schools. At the end of practice teaching in either laboratory school or co-operating school, there is a critic meeting participated in by the student teachers, supervisors and co-operating teachers and the Dean of Practice Teaching of the laboratory school. They work out recommendations for the improvement of the students' teaching performance.

Evaluation. Except for the final external examinations in Chinese and Mandarin conducted by the Department of Education, all the examinations are internal. Written tests are generally given, but oral tests, practical examinations, and the like are also used depending upon the nature of the courses or the teaching. Evaluation includes daily class quiz, monthly test, quarterly test, semestral test, annual test, final test and graduation

test. The external test can be regarded as the last factor in deciding graduation. It is very important to the senior students. The grading system is as follows:

		Marks
A+ - A	(5 points) =	100-85
B+ - B	(4 ") =	84-70
C+ - C	(3 ") =	69-55 (fail)
D+ - D	(2 ") =	54-40
E+ - E	(1 point) =	39- 0

Student teaching is evaluated by the supervisor and co-operating teacher, or the critic evaluator. Generally the only criteria are P (pass) and F (fail). A student cannot graduate if he fails in practice teaching. There are no other definite criteria or requirements.

If the student can earn 150 credits (secondary) or 250 credits (primary), including practice teaching, he can be awarded a diploma and a B.S.E. degree.

The graduates of institutions for primary teacher training automatically get the right to teach in elementary school and they are so assigned by the Department of Education. At the end of five years' teaching they are free to change their profession. This also applies to the graduates of institutions for secondary teacher training, except that (1) they have to serve for one year before they can get the degree and diploma; (2) they automatically get the right to teach but in secondary school, and they are assigned by the Ministry of Education; and (3) any time after they get the degree, they can give up their profession.

Graduates of institutions other than the teacher training institutions have to pass a screening examination to qualify them either as primary or secondary teachers.

Teacher educators

Qualifications. The minimum qualification for teacher educators in institutions for primary teacher training is a B.S.E. degree, that is, graduation from the Department of Education of a university. However, some of them are only graduates from other departments, while a few have even an M.Ed. degree.

Teacher educators in institutions for secondary teacher training have also the same minimum qualification. But some have an M. Ed. degree and even doctorate degrees. It has not been possible to prescribe the master's degree as the minimum qualification because at present there are very few graduate schools which prepare teachers for the M. Ed. degree.

Recruitment. The President of the University is appointed by the Ministry of Education. The President appoints the members of the faculty on the basis of their academic qualification, teaching, and administrative experience.

Staff gradations and duties. The exact responsibilities of the president and principal include : (1) supervision of the faculty in the teaching and administrative service; (2) employment of faculty ; (3) evaluation of faculty in the teaching and administrative service; (4) preparation of the budget; (5) construction of school buildings.

Except the assistants, all the other faculty members constitute the teaching staff. They hold teaching certificates of professor, associate professor and instructor issued by the Ministry of Education.

In-service education

The higher qualification and the salary increments that follow, operate as incentives for the further education of the teachers.

In-service training programmes are conducted by most of the teacher training institutions, such as the in-service training programme for secondary school teachers organized at the Taiwan Normal University, the one-year in-service training programme for unqualified primary school teachers, and the three-year training programme (evening section and summer section) for qualified primary school teachers in the service (to improve their quality) organized in the institutions for teacher training. There are, in addition, four permanent in-service training centres. One is in the Taiwan Normal University, the other in Chang-Hwa City, both of which offer in-service training for secondary school teachers. The third one, in the Taichung Junior Teachers' College, offers in-service training for teacher educators, and the fourth, in Pan-Chiao, offers

in-service training for elementary school teachers and school masters.

No professional organizations are involved in this work and the courses do not lead to the acquisition of any degree.

The In-service Teachers' Education Centre in the Taiwan Normal University emphasizes the purpose of meeting the urgent demand for competent middle school teachers. It particularly lays stress on the improvement of science education. It offers to teachers of science from both junior and senior middle schools a course of training lasting for two, four, eight or seventeen weeks. So far there are 5,724 teachers of English, Chinese, physics, chemistry, natural history and mathematics, and some technicians who have received such training.

The Taiwan Provincial Elementary School Teachers' In-Service Education Centre in Pan-Chiao offers training programmes lasting from one to two weeks, to three months, the time varying in accordance with the nature of the different programmes. There are three categories among the trainees: the first is middle-grade and upper-grade teachers of language, arithmetic, and natural science; the second is lower-grade teachers who teach child singing and dancing, crafts, and combined unit teaching; the third is the grade teachers of music, physical education, arts, audio-visual teaching, library management and science. In addition, there are two reservatory classes: one for school masters and the other for deans of instruction who, though qualified and experienced teachers, are to be prepared for their promotion. The areas included in the training programme are:

1. Cultural study (12.6%): Chinese culture and the world; philosophy of Confucius; modern history; three principles of people; political education.
2. Life education (25.58%): Behaviour education; etiquette; life education, theory and practice.
3. Leadership and ability (20.15%): School planning, scientific approach in school administration; group relationship; public speech; school and community development.
4. Professional knowledge and techniques (41.63%): Instructional administration; research study on

teaching methods; library management; curriculum study; applied audio-visual education; education for exceptional child; research study on group activities; school health and nutrition; safety education; operation and maintenance of school buildings; tests and measurement; educational experiment; field trip; elective (20 subjects); thesis.

The In-Service Training Centre for Primary Teacher Educators in Taichung Junior Teachers' College offers refresher training courses for teachers of normal schools and teachers' colleges and supervisors of normal schools, junior teachers' colleges and local governments. The duration is 8 weeks for the refresher training courses for primary teacher educators which consist of lectures, seminars, practice teaching and field observations. The duration is 6 weeks for the refresher training courses for supervisors from the Department of Elementary Education of the Ministry of Education, the Provincial Department of Education, and the Provincial Department of Education supervisory team, and supervisors of local governments, regional supervisors of normal schools and normal colleges. The courses consist of lectures, seminars, practice in supervision techniques and field observations. The teacher educators include all those concerned with teaching curricular courses (subject-matter and teaching methods), teaching practice, elementary school administration and educational administration; as well as those concerned with teaching biology, chemistry and physics; and those concerned with language teaching, children's literature, Chinese, guidance and audio-visual education.

The Provincial In-service Training Centre for Secondary School Teachers in Chang-Hwa City is newly established. It offers only sessions for guidance teachers and P.E. teachers for a three-month programme. In the light of its policy, it may offer "credit courses" in future, which will probably lead to the degree of B.S.E.

The in-service courses are all compulsory, and the participants get travelling and daily allowances as well as stipends.

Radio, television or correspondence education has not yet been adopted as the method of in-service training. While

institutional courses are the normal pattern, regional conference and workshops are increasingly being adopted as new ways of carrying out in-service training programmes.

Research

So far there have been no agencies doing research in teacher education. The presidents of the colleges have the responsibility to improve the teacher education programme in their own institutions, but they can only make suggestions and recommendations to the Provincial Department of Education and the Department of Education of the Ministry of Education through conferences and official channels. Research has therefore been confined mostly to producing teaching materials. Most of the teaching materials are prepared by members of the staff and are published by the authors themselves. It is expected that every teacher should conduct personal studies, especially in universities and colleges. Further, the National Science Development Association subsidizes the research studies undertaken by professors, associate professors and instructors every year. One of the requirements for the promotion of teachers is the report of personal study. Another condition favouring research by members of the staff is that the teaching load of those who do research is reduced. These steps taken by the authorities encourage all the teaching staff to conduct research and study regularly.

INDIA

Education system: structure and organization

As education is a State responsibility, there is no uniformity in the structure of the education system. Most of the States have structures which approximate the following generalized pattern:

i) Primary (grades I to IV or V)

ii) High (secondary) school (grades VIII or IX to X)

iii) Higher secondary of intermediate (grades XI-XII)

iv) College or university, leading to first degree, Master's degree and doctorate.

Compulsory education is aimed at the age-group 5 to 11 as the first stage in the extension of primary education to 7 years. Progress varies in the different States.

In 1968-69 the number of institutions and teachers in them were as follows:

	No. of institutions	No. of teachers
Lower primary schools	399 109	1 026 152
Upper primary schools	89 943	576 363
Secondary schools	32 433	523 341
Universities	76	
University States institutions	10	119 000
University colleges and affiliated colleges	8 007	

Text based on response to the Institute's questionnaire through the courtesy of the Ministry of Education (India) supplemented by information derived from other documents.

Survey of teacher education

In 1970-71 estimated enrolment in lower primary classes was 60.11 million (79.6% of the age-group 6-11) in grades VI to VIII, 13.82 million (34.1% of the age-group 11-4) and in grades IX to XI, 7.55 million (30.8% of the age-group 14-17). In higher education it is expected to be 2 million.

Teacher education

Teacher training institutions were first established in the country by Danish missionaries, beginning with the normal school set up at Serampore in 1787. Later educational societies in Bombay, Madras and Calcutta established some centres for this purpose. A training class for teachers was organized by the Calcutta Ladies Society in the central school for girls. In Madras, the first attempt towards teacher training was made by Dr. Bell who introduced what he called the monitorial system of teacher education. As early as 1826, a central school for the professional education of teachers was established in Madras. In 1856 the Madras Normal School was established. Similar normal schools were established in three other provinces before 1857.

Grant-in-aid rules framed after 1859 helped to promote institutions for the training of teachers. The Indian Education Commission of 1882 also emphasized the training of primary level teachers. Immediate steps were taken to increase the number of normal schools. In 1901-02 there were 155 teacher training schools for primary level in the country. The Declaration in 1913 that "eventually under the modern system of education, no teacher should be allowed to teach without a certificate that he had qualified to do so" was followed up by the establishment of one normal school in each district by all provincial governments. In 1921-22, the country had 1,072 primary teacher training institutions.

A policy of amalgamation and consolidation was adopted as the next step. Small and inefficient units attached to middle schools were discontinued (Uttar Pradesh, Bengal and Bihar). The number of training institutions, therefore, decreased from 1,072 in 1921-22 to 649 in 1946-47. However, the percentage of trained teachers steadily increased during this period.

The task of securing an adequate supply of suitable teachers assumed great importance after India became independent

in 1947. In 1949-50, the total number of matriculate teachers in primary schools was 8.8 % of the total number of primary school teachers. By 1958-59 this number rose to 30.5 %. The number of training institutions rose from 649 in 1946-47 to 1,358 in 1960-61.

For secondary teacher training there were only 41 training colleges and university education departments in 1947. By 1966 their number had risen to 256. Of course, more than 25 institutions provided also for M. Ed. and Ph. D. courses.

The establishment of the National Council of Educational Research and Training (NCERT) in 1961 was a significant event in the field of teacher education. The council set up a National Institute of Education as a national organization to offer high-level programmes in education and to investigate into the problems of education and suggest solutions to them. A Department of Teacher Education was also set up in 1964. Its main objectives are to examine, evaluate and co-ordinate programmes of teacher education conducted by the State Departments of Education and the universities and to take all such measures as will lead to an improvement in teacher education for the elementary and secondary levels of school. In 1966 this Department started a full-time 9 months' Diploma Course in Elementary Teacher Education for teacher educators on an all-India level.

A chain of State Institutes of Education was also established in all the States with the assistance of the Union Government in 1964. The main functions of these institutes are to provide various training courses for the supervisors of schools or teacher educators, to organize conferences and seminars for senior State education officers, to conduct or supervise extension services in training institutions for elementary teachers, to improve teacher education in the States and to assist the State Departments of Education in the preparation and implementation of educational plans.

In 1963 and 1964 four regional colleges with attached demonstration multipurpose schools were started. These colleges offered a four-year course to train teachers in English, science and technical subjects like agriculture and engineering. The regional colleges undertook also programmes of teacher training to clear the backlog in their own regions, and these included summer courses and correspondence courses.

Administration, control and financing. The Ministry of Education of the Government of India has responsibility for giving general directions and the maintenance of standards in higher education. It exercises this responsibility through persuasion. Autonomous institutions like the University Grants Commission and the National Council of Educational Research and Training have been set up to give technical and financial assistance for initiating, improving or upgrading courses, starting new institutions etc. Direct grants are also made by the Ministry to the States.

Education being a State subject, the Ministry of Education of each State has overall responsibility for policy making and controls all departments in charge of education. In most States there is one department for primary and secondary education and another for higher education, each under a Director. There is no separate department for teacher training, and the administration and supervision of primary teacher training institutions is vested in one or other of the State Departments of Education.

Institutions for secondary teacher training are part of universities. If they are university departments they are autonomous; if they are training colleges, they may be under private or government management but their academic programme is governed by university regulations and the university is responsible for examining all candidates.

A majority of secondary teacher training institutions are private. The private institutions are of two types: government aided and unaided. Some institutions which do not receive grant-in-aid from government are assisted by other public bodies such as municipal councils etc.

In the case of government institutions, the Government meets the entire cost of establishing and running them. Ninety per cent of the expenditure of aided institutions for primary teacher training is met directly by government in the form of grant-in-aid. The Government meets 100 % of the expenses on the institutions for secondary teacher training directly managed, while in the case of private-aided institutions, the Government makes a grant which varies from State to State.

Types, levels and duration. The nursery training schools provide training for nursery school teachers. The duration of the training course varies from one to two years in different States. The minimum qualification required also varies in different institutions but generally the candidates are required to have either a high school or a higher secondary or an intermediate (Class XII) certificate.

The majority of primary teacher training institutions are government institutions. The duration of the training course varies from one to two years generally and some States have raised it to three years. The minimum qualification is high school or higher secondary or intermediate pass. A trained teachers' certificate is awarded to successful candidates.

There are a few institutions where the minimum qualification required is a Bachelor's degree. In these institutions the duration of the course is one year, and leads to a degree in education.

Teacher training colleges preparing teachers for secondary schools offer a one-year course after university graduation. Some institutions offer specialization in some subjects. This course leads to a B. Ed. or B. T. degree.

There are a few comprehensive training colleges sponsored by the Ministry of Education. These colleges offer various types of programmes.

For clearing the backlog of untrained secondary school teachers, evening and correspondence courses are organized by a few teacher training institutions. These lead to a B. Ed. or B. T. degrees.

There are teacher training colleges which are mainly concerned with the training of teachers for home science or home economics. These too lead to a degree in teaching.

There are many physical training colleges which offer professional courses in physical education. Some train teachers for primary schools; others for secondary schools, the latter being often post-graduate courses.

Several universities and a few teacher training institutions offer courses leading to the Master's Degree in Education. The

minimum qualification required for these courses is a degree or post-graduate diploma in education. Some experience in teaching is required in addition to the academic qualification. The duration varies from 9 months to 12 months full-time and two years, if part-time.

A few States offer courses in educational and vocational guidance and counselling. Classes for training of elementary teachers attached to secondary schools, and departments for secondary teacher training attached to arts and science degree colleges present a type of organization which had come about in some States for historical reasons. The Education Commission (1964-66) has suggested that these are to be discontinued.

There were 1,548 institutions for primary teacher training in India and 185 teachers' colleges, 56 education departments attached to degree colleges and 32 university departments in charge of secondary teacher training, making a total of 273 institutions. Of the institutions for primary teacher training, 49.3% were located in urban areas, 42.2% in rural areas and 8.5% in the suburban areas. 87.5% of the institutions for secondary teacher training were in urban areas and only 12.5% in rural areas. The Education Commission (1964-66) pointed out the imbalance and suggested that a certain proportion of these institutions should be located in rural areas with practice teaching arrangement made in the neighbouring schools.

Admission and enrolment. Teacher training institutions in India whether for primary or secondary teacher training tend to be small in enrolment size, with an average enrolment of about 200. The Education Commission of 1964-66 suggested that the minimum enrolment of a training institution for the elementary stage with the two-year training programme should be 240, and that for the secondary level should be 200. The existing institutions were to raise their intake to this size in a period of five years. But any new ones started must have a minimum size of not less than 400.

There is great variation in the procedure of selection. Selection for admission to the institutions for elementary teacher training depends mainly on the previous academic qualifications. The minimum qualification for admission to a primary teacher training course is 10 or 11 years of schooling, and

marks obtained in the school leaving or matriculation examination are taken decisively into account. The minimum age for admission varies from 16 to 18 years in the different States while the maximum age does not go beyond 35 to 40 years. The Syllabi Committee on Elementary Teacher Education suggested that: (i) teachers above 35 years with 10 to 15 years' teaching experience may not be given regular training but may be given short-term in-service courses; (ii) teachers below 35 years with 10 to 15 years' teaching experience may be given one year training; (iii) all others may be given 2 years' training. The Education Commission (1964-66) also gave similar views but with variation of age at 40 with five years' experience.

An interview by a small board consisting of the principal of the institution and one or two officers of the Department of Education is held for candidates who are not already employed as teachers. The written tests used in the battery of selection tests are Scholastic Achievement and General Knowledge Test. These written tests are given in Orissa, Gujarat, Delhi, Jammu and Kashmir. They are prepared, administered and scored by the staff members of the training institutions. Physical and medical examinations are conducted in which defects in speech, hearing and eyesight are noted as causes for disqualification. Individual interview which lasts from five to ten minutes is held after the tests.

Admission procedures to the colleges for secondary teacher training are similar. Some institutions have developed selection tests and others depend on interviews only. The qualification for entrance to a one-year course is graduation from university, and for a four-year course it is graduation from high school.

The number of students enrolled in and graduated during three consecutive years from the institutions for primary and secondary teacher training are given in Tables 1 and 2. In secondary teacher training the overall unused seats during 1963-64 were 5% while during 1964-65 these were 6% of the total sanctioned seats. Against 25,176 seats for 1963-64, the actual enrolment was 23,801; and against 26,769 seats for 1964-65 the actual enrolment was 25,264. However, 7% of the colleges enrolled more than the sanctioned seats, 79% had students to their full capacity, while only 14% had less admissions than the sanctioned seats during 1964-65.

Table 1. Number of students enrolled in the last three consecutive years

Type of teacher training institutions	Number of students enrolled								
	1962-63			1963-64			1964-65		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	44 353	13 420	60 517 (840 insts)	42 684	15 257	61 089 (787 insts)	46 619	16 174	65 883 (759 insts)
Secondary teacher training	8 041	3 543	11 584 (122 insts)			23 801 (238 insts)			25 264 (247 insts)

Table 2. Number of students graduated in the last three consecutive years

Type of teacher training institutions	Number of students graduated								
	1962-63			1963-64			1964-65		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training									
Secondary teacher training				13 590	7 484	21 074	14 154	7 957	22 111

The number of institutions for primary teacher training in the year 1969-70 (i.e. July 1969 to April 1970) and enrolment in them are as follows:

No. of primary teacher training institutions	1 226
Enrolment for the year 1969-1970	117 179

Of the 1.60 million teachers in primary schools in 1968-69, 1.24 million were trained, that is 71%. At the secondary stage, 381,000 teachers were trained, i.e., 73%.

Facilities. The government teacher training institutions are provided with buildings, equipment and other supplies by the State Department of Education. Private aided institutions are given only ad hoc grants by the government so as to meet their needs partially. A few private institutions are equipped with suitable buildings and adequate equipment, but most of the institutions are not well provided with all these amenities.

The reasons for admitting small numbers in teacher training institutions was not the non-availability of qualified applicants; in fact the enrolment was seen to be optimum for both elementary and secondary teacher training in all but a few colleges. However, about 30% of the colleges alone had adequate reading rooms, and 51% adequate assembly halls.

Student aid. In government institutions in most States of India, no tuition fees are paid by those enrolled for primary teacher training. Private institutions charge fees. In some States, 95-100% of fresh candidates in government institutions enjoy stipends or scholarships in the amount of $40 to $55. Secondary teacher training is also free in some States while in others a small fee is charged even in government institutions.

In the institutions for primary teacher training managed by the Government, financial and other assistance available to students include stipends, merit scholarships and maintenance grants to the students. The number and rate of stipends differ from State to State. In some States all teacher trainees for primary level teaching get stipends, whereas in others only 25 to 50% of the trainees get it. Fee concessions and stipends are available to about 5 to 10% of the students in private institutions. In government institutions for secondary teacher training, stipends, merit scholarships and maintenance grants are available for about 10 to 15% of the students in addition to fee concession.

The student-teachers are required to stay in hostels in most cases. But in view of the rising number of admissions and the limited number of seats available at some places, some of them are permitted to stay outside the campus.

Organization of instruction. The average class size in an institution for primary teacher training or for secondary teacher training is 40 to 50. The First National Survey on Primary Teachers (1959-60) considered the class size of 40 as quite satisfactory because it was both manageable and economical. The ratio of teachers to students in institutions for primary teacher training, on an average, is 1:12, though in individual institutions it varies from 1:9 to 1:40. In the institutions for secondary teacher training this ratio, on an average, is 1:10, though in individual cases it varies from 1:4 to 1:19. Generally speaking, all teachers in institutions for primary teacher training including instructors in art, craft and physical education are full-time, though sometimes they are attached to institutions for secondary teacher training and called upon to work in the institution for primary teacher training as part-time instructors. The teaching load of teacher educators varies: principals and others who have administrative duties take a teaching load of only 2-7 hours per week whereas professors, readers and lecturers with supervisory responsibilities take 10-15 hours per week. The organization of the teachers' colleges into academic departments is not common and even university departments of education are seldom organized into academic departments. Only the regional colleges are organized into academic departments.

The lecture is the prevalent method sometimes supplemented by audio-visual aids, discussions, written assignments and observations.

Curriculum. The professional courses in primary teacher training curriculum comprise: principles of education; educational psychology; education in India; methodology of teaching school subjects; and student teaching. Under general education, it has subject content courses, practical work, community activities and art and craft. In the secondary teacher training programme, the professional subjects include foundation of education (philosophical, sociological and psychological); education in India; methodology of teaching school subjects; and student teaching. The general education subjects include content

courses; practical work; community activities; art and craft. Advanced courses in teaching school subjects, special subjects like educational guidance and counselling, comparative education, educational measurement and evaluation, audio-visual education, school library work, educational administration, basic education, health education, physical education, social education etc., are also provided for.

The courses of studies are prescribed by the universities or in the case of primary teacher training by the State Education Department. An attempt to bring about uniformity in the training course of secondary school teachers is being made by the Department of Teacher Education (NCERT); and for this purpose a Curriculum Guide for Secondary Teacher Education has now been issued. The Education Commission (1964-66) suggested that about 20% of the time in the training programme be devoted to content knowledge of the subjects to be taught at school. The training period should be of two years' duration for the elementary level in all cases, and for the secondary level the training period may eventually be extended to two years.

Student teaching. Generally the institutions for primary teacher training have attached practising schools. Student teaching is arranged as "block teaching practice", intermissive or continuous. However, in practice, while the total time spent on student teaching in one year ranges from 11 to 86 hours, the time spent on block teaching ranges from 2 to 50 hours in one year. The requirement for student teaching in most of the institutions for the two-year primary teacher training programme is 24 to 30 lessons in the first year, and 24 to 50 lessons in the second year. Generally, the following are required for admission to student teaching: (1) some review work in the school subjects; (2) some acquaintance with teaching methodology; (3) study of selected aspects of school organization and management; (4) demonstration of ability in the preparation and use of teaching aids; (5) observation of lessons given by school teachers and by training college staff.

Before student teaching starts, an orientation programme is conducted through lectures, seminars, and discussions, and through lesson planning, practice lessons and demonstration and criticism lessons. Student teaching is generally completed in phases. The first phase consists of observation of lessons given

by the staff of the training institution and by selected teachers in the "practising schools." The second phase consists of the teaching of discrete or "correlated" lessons. The third phase is devoted to full-fledged practice teaching generally spread over two weeks, and organized in single blocks or daily long-term practice during specified hours of the day.

Students in the institutions for primary teacher training get an opportunity to observe and teach in the laboratory schools, or in off-campus co-operating schools. Six to twelve demonstration lessons given by teacher educators are observed by each student-teacher. The scope of student teaching in India includes preparing the required teaching materials, experimenting with the teaching methods and procedures studied in theory classes, attending to the beautification of the classrooms, helping children in their games, participating in field trips and excursions of school children, organizing out-of-school activities for children, teaching literary classes in the community schools, participating in village development programmes, and volunteering help during local fairs and festivals.

The institutions for secondary teacher training also have generally attached practising school. The time spent on student teaching varies from State to State and from 58 hours to 152 hours, the mean average being 110 hours per year. The Education Commission (1964-66) suggested that all the training institutions should have a demonstration school. Supervision and evaluation of student teaching are done by lecturers with or without the assistance of co-operating teachers. The regional colleges follows an internship programme in student teaching. The Education Commission (1964-66) divides student in the secondary teacher training programme into two phases; first, to orient the student-teachers to the entire school situation with some initiation into actual teaching; second, to enable them to do continuous teaching for a specified period of at least 8 weeks under actual school situation.

Evaluation. Most of the States combine internal assessment. The general tendency is to assess the practical work internally and have external examinations only for the theoretical portion of the curriculum. In some States a percentage of marks is reserved for internal assessment in theory also. In one State,

the question papers (in theory) are set by the State Board but the scripts are examined by the members of the staff of the institutions.

The tutorial system exists in almost all the institutions. The teacher guides the student-teachers in their academic as well as in their personal difficulties. Students can discuss their problems individually with the teachers concerned. One period in a week is given for organizing and guiding the cultural activities of the group.

Teacher educators

The minimum qualifications for teacher educators in the primary teacher training institutions are a B. A. degree and a B. Ed. degree. For the teacher educators of institutions for secondary teacher training they are either a bachelor's degree in arts or science and an M. Ed. degree, or a master's degree in arts or science and a B. Ed. degree. The Education Commission (1964-66) felt that the staff of the training colleges for secondary teacher training is not adequately qualified and recommended a double Master's Degree (M. A. in an academic subject and M. A. in education) with specialization in teacher education, as the essential qualifications. A fair proportion should also be Ph. D. Teacher educators for training elementary school teachers should be B. A., M. Ed., or M. A., B. Ed., with special orientation for preparing elementary teachers. Steps have been taken towards improving professional preparation of teachers through organizing intensive teacher education programmes, and in-service courses and summer institutes.

Recruitment. Recruitment of teacher educators for institutions for primary level teacher training is done mainly through interviews at the State level by the Public Service Commission in some States or at the divisional or district level in others, in the case of government institutions. Private institutions have their own methods of recruitment; generally, the management of the institution recruits them with or without a member from the education directorate sitting with them. This policy of recruitment holds good for secondary teacher training institutions as well. The Education Commission (1964-66) raised objection to this practice of recruitment through mere interview, and felt that interviews hardly have any meaning and tend to discourage

first-rate men. A fair selection is possible only through careful consideration of the merits and standing of the candidates in the field of their work.

The number of teacher educators in the country in 1966-67 was 3,523 for teacher training schools, and 12,942 for teacher training colleges.

Staff gradations and duties. Apart from principals, institutions for primary teacher training usually have only teachers, sometimes called lecturers. Institutions for secondary teacher training may have professors, readers or assistant professors and lecturers. They all share in teaching and in supervising and evaluating student teaching.

In-service education

In-service education for primary school teachers is still in its infancy, having been started in 1961 with 30 centres of in-service training. Fifteen more centres were added in 1965. These centres, called "extension centres", are attached to the institutions for elementary teacher training at selected places. The centres experiment with new procedures of working with elementary school teachers. Each centre has 50 elementary schools within a radius of ten miles and organizes training courses and refresher courses for the teachers in these schools. The staff of the training institute provides consultative services to the schools. The centre also brings out publications from time to time for the guidance of teachers.

Great importance is now given to in-service education. The Education Commission (1964-66) stressed the need for continuing education of teachers and proposed to organize courses through a number of agencies like schools, training institutions, education departments, teachers' organizations, etc. It was suggested that every teacher should be able to receive at least two to three months of in-service education in every five years of service, and for this every training college has to be adequately staffed and equipped. The State Institutes of Education organize short-term in-service courses of 3 to 9 months' duration for primary school teachers. Besides conducting correspondence courses, seminars and conferences, the Department of Teacher Education of the National Council for Educational Research and Training also organizes in-service courses and

summer institutes for the teacher educators of primary teacher training institutions.

Some of the States are encouraging selected training institutions to take up extension work as a part of their normal duties. Guidance to such institutions is being provided by the respective State Institutes of Education and the Department of Primary Education of the NCERT.

The in-service education programme for the secondary school teachers was organized by a Secondary Education Council before the NCERT took over the responsibility. More than 100 extension centres have been functioning since then. A Department of Field Services was organized for this purpose in the NCERT. The regional colleges also help in this programme. Short-term courses, correspondence courses, seminars and workshops are held by the Department of Field Services as well as the regional colleges.

Research

Research in the teacher training institutions is being encouraged, and recently individual studies and co-operative studies have come out from some institutions for primary and secondary teacher training. Institutions for primary teacher training are being encouraged to take up research projects, especially those to which extension centres have been attached. The State Institute of Education in each State has a separate section for undertaking research at the elementary level. Stress is being laid at present on practical problems. Some State Institutes of Education have brought out research studies and publications of wider importance. Some grants are offered by the NCERT to secondary schools to undertake research and experimentation. The institutions for secondary teacher training also take up research problems. The university departments and colleges which offer the M. Ed. and the Ph. D. programme also produce some research. Research is encouraged through government grants to State Institute of Education and UGC fellowships and NCERT grants to individual research workers in training institutions. The output is however limited in quantity and quality because of shortage of staff, financial resources and technical assistance. Universities also provide research fellowships for Ph. D. in departments of education. Abstracts of research have been published by the NCERT.

INDONESIA

Education system

Present structure. The school system consists of six years of elementary school, three years of junior high school, three years of senior high school and three to five years of college and university. Elementary education is compulsory and free. The age to elementary school is six but children may be enrolled at a later age also. At all levels the institutions are co-educational and the medium of instruction is the Indonesian language except in the first two grades of the elementary school where the local language is used. Public examinations conducted by the State at the end of grade VI and grade IX serve as entrance examinations to the junior high school and the senior high school respectively. [1]

There are a number of educational institutions which are controlled by Ministries other than that of Education. Most notable among these are the Madrasahs under the control of the Ministry of Religious Affairs. These are established by the Islamic organizations and offer a curriculum for elementary education which includes religious instruction to the extent of 20-50 % of the total teaching hours. Those who pass the State examinations at grade VI from the Madrasahs are also qualified to enter public junior high schools. At the secondary level, there are many types of vocational schools which are under the control of other ministries. All agricultural high schools are maintained by the Ministry of Agriculture. The teacher training school for Madrasahs is run by the Ministry of Religious Affairs. The Ministry of Industry maintains the school for technology and the Ministry of Health runs the school for nursing and midwifery.

In the general education system, the junior high schools are fairly diversified and the vocational subjects offered include

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Text based mainly on documentary information.

1. State examinations are gradually being replaced by school examinations beginning 1970.

technical, commercial, and home economics. The senior high school too is of different types such as general, vocational and normal. The general senior high school has four streams: mathematics, social science, natural science and literature. Teacher training schools at the secondary education level include training courses for elementary school teachers, domestic science teachers, technical school teachers and so on. The higher educational institutions offer the bachelor's degree after three years of study and the master's degree after two additional years. There are 35 State universities of which 11 are institutes of education. All the schools mentioned above were under the control of the Ministry of Basic Education and Culture and the Ministry of Higher Education; these have since been integrated to form the Ministry of Education and Culture.

Teacher education

There were several types of institutes responsible for the training of teachers from kindergarten up to grade VI, and several other types for the junior and senior high school levels. The programmes of the first group of institutes ranged from 6 months to 6 years in duration after 6 years of schooling (elementary school). Some of these institutions are no longer in existence; others will be closed in the near future. There were also before 1964 a very large variety of teacher training programmes and of training institutions.

In 1964, all different types of teacher education institutions for elementary school teaching were amalgamated into Sekolah Pendidikan Guru (SPG), that is Teacher Education School. The SPG was divided into two divisions, namely, SPG C-1 and SPG C-2. SPG C-1 had a duration of four years for the graduates of six-year elementary school, while SPG C-2 offered a course of three years for graduates of junior high schools. SPG C-1 was abolished later and SPG C-2 only remains today and it is known therefore as SPG only. The number of students in all teacher training schools (SPG) in 1970 was 61,343, which registers an annual rate of 9.8% increase over the 1960 enrolment.

Management, control and financing. Primary teacher training is supervised by the Director of Teacher Education who works under the Director-General of Education in the Ministry of Education and Culture. The primary teacher training schools

are operated both by the government as well as by private bodies. Institutions for secondary teacher training are placed under the Department of Higher Education.

Educational administration and finance, at the central level, was in the hands of the Ministry of Education until 1961. Since then this function was shared between the Ministry of Basic Education, the Ministry of Higher Education and the Ministry of Physical Education. Private contributions played a considerable part in the financing of public education. Curricula, teaching methods and examinations were controlled by the Ministries of Basic Education and Culture, and Higher Education. These Ministries have been integrated to form the Ministry of Education and Culture. The Ministry of Interior is responsible for teachers' salaries and for assisting local bodies in school building and their equipment. Central government inspectors have powers of supervision over the local inspectors in the provinces.

Types, levels and duration. All primary school teachers are at present trained in SPG, which are now the only type of primary teacher training institutions. The SPG have three sections: (1) for the training of kindergarten teachers (SPG-Section A); (2) for the training of elementary school teachers (SPG-Section B); and (3) for the training of special education teachers in the general elementary schools (SPG-Section C). The duration of training in the SPG is three years for those with nine years of schooling. With the SPG as the core, several institutions at the same level, however, continue with the primary function of implementing in-service education. The number of SPG in 1968 was 197 under Government management, 55 subsidized, 17 aided and 88 private, making a total of 347. The Five-Year Development Plan envisages the starting of at least one SPG in every regency to meet the increasing need for primary teachers. Secondary school teachers are prepared in Institutes for Teacher Training and Education (IKIP). Indonesia has now 11 IKIP under government management. Some IKIP have branches and together with these they number 16. The IKIP offers a five-year programme of teacher education - three years for the B. A. and two years more for the M. A. degree. It will take a long time before graduates from the IKIP would be available to fill the requirements of the junior high schools, unless their

number increases. Hence, there is a proposal to integrate into the IKIP the colleges for emergency secondary teacher training (PGLSP) before the end of the first Five-Year Development Plan period.

Admission and enrolment. Students of the SPG (elementary teacher training institutions) are admitted on the basis of the following qualifications: (i) they must be a graduate of a public or government junior high school; (ii) they should have passed a health examination, both physical and mental, conducted by a government physician; (iii) they should not be more than 20 years old; (iv) they should be unmarried; (v) they should possess good moral character as evidenced by the recommendation of the principal of his former school; and (vi) priority should be given to the candidates sent in by their respective local governments.

After their selection the candidates spend a week of probation at the training institution where they are seeking admission. During this period, they are observed by members of the faculty, ranked and then, as many as are required, are selected following their rank order.

From among the students who attend the SPG for three years, the best ones are directly admitted to the IKIP. Others have to render two years of teaching service before they can continue their education at the IKIP to work for the B. A. degree

The total number of students in all the public universities in 1970 undergoing teacher training courses was 27,792, which is 23 % of the total enrolment in university faculties. There is a great demand for qualified teachers and a serious shortage at high school level especially in natural science and mathematics. It is found that 77.4 % of the teacher trainees take up non-science subjects. The need for increasing the supply of qualified teachers is now underscored. Every offer is being made to replace the large number of part-time teachers who teach one or more courses at the junior high school and senior high school levels. The teacher-pupil ratio is about 1:37 in 1970 in the public schools under the Ministry of Basic Education and Culture. In 1967, there were 285,968 elementary school teachers of whom 251,529 were public school teachers and the rest were private school teachers. The percentage of men teachers was 68.5.

The Five-Year Development Plan has introduced vocational training in general secondary schools: agriculture, home economics and several technical subjects along with science and mathematics. The present teachers cannot take up this responsibility unless they get extra training through in-service education. The IKIP are able to train about 3,000 secondary level teachers annually. By 1973 it has been estimated that Indonesia will need 9,260 junior secondary school teachers, more than the IKIP can turn out at this rate. The shortage is expected to be met by integrating in the IKIP the emergency colleges for secondary teacher training (PGSLP) which may produce 2,300 teachers annually.

Table 1. IKIP students enrolled and graduated (1966-69)

Faculty		Students enrolled			Students graduated		
		Boys	Girls	Total	B. A.	M. A.	Total
1. Education	a	1 920	2 196	4 116	-	-	645
	b	-	-	4 841	385	158	543
2. Teaching of literature and arts	a	1 330	2 608	3 938	-	-	174
	b	-	-	5 726	511	201	712
3. Teaching of social science	a	3 984	2 431	6 415	-	-	444
	b	-	-	9 007	709	283	992
4. Teaching of exact science	a	1 058	1 036	2 094	-	-	127
	b	-	-	3 317	196	109	305
5. Teaching of technical science	a	1 371	947	2 318	-	-	47
	b	-	-	1 389	83	7	90
Total	a	9 663	9 218	18 881	-	-	1 430 (1)
	b	-	-	24 280	1 884	758	2 642 (2)

Note: Compiled from various sources by Dr. Winarno Surachmad.

a = 1966 data based on 6 IKIP (1) = 1965-66 figures
b = 1968 data based on 11 IKIP (2) = estimated figures for 1969

Student aid. No school fees are charged. Scholarship awards are few and students who get scholarships are required to serve for a few years after graduation. Free board and lodging are provided. The most serious problem encountered in recruitment is, however, the low salary paid to primary school teachers. There is a guarantee of a teaching assignment on the successful completion of a training course if they like to teach in rural areas.

Organization of instruction. The curricula of B-I and B-II courses stressed only subject matter and had very little or no professional education. Classes were conducted mostly in the senior high school buildings in the afternoons and evenings as they had no buildings of their own. The Institute of Teacher Education (SPG) in Bandung helped the teachers with written courses for study on their own. Conditions have changed and the SPG now has three departments, namely, departments of kindergarten, elementary education and handicapped children. The courses conducted for the training of senior high school and elementary school teachers have each a duration of three years. In the first year, all students take the same curriculum but from the second year, they branch off into one of the departments, each of which follows a different curriculum.

Usually, IKIP has five faculties, each with a number of departments. The highest total of all departments in any IKIP is 27.

The Faculties are: Education, Social Sciences, Literature and Arts, Mathematics, Technology.

The responsibility of the Faculties are: (i) Education is responsible for preparing teachers for primary teacher institutions SPG; (ii) The other four faculties are responsible for preparing teachers for secondary schools.

The Departments in the Faculty of Education are: Philosophy and History of Education, Community Development, Guidance and Counselling, Special Education, Curriculum, Administration and Supervision, Home Economics.

Each SPG has, on an average, 10 full-time teachers, making the teacher student ratio 1:24; if part-time teachers are included, this ratio will be 1:15.

The principal has to teach 10 hours a week and the regular teachers, 18 hours. The teaching load of non-permanent (part-time) teachers is about 12 hours a week.

Curriculum. The SPG curriculum has three main parts: a) Courses to promote the spirit of Panchasila; b) Courses to promote basic knowledge; and c) Courses that provide specific knowledge, art and skill.

Each group has its own goals and consists of several subjects and activities.

The Director of Teacher Education and Technical Power has decided that the group for promoting the spirit of Panchasila and basic knowledge should comprise 40%, and the third group, 60%.

The following table presents the SPG curriculum:

Table 2. The SPG curriculum

Group of subjects	Class Department	I	II			III		
			A	B	C	A	B	C
I. Group for promoting the spirit of Panchasila								
a) Religious education		3	3	3	3	3	3	3
b) Civics		2	2	2	2	2	2	2
c) Bahasa Indonesia		3	3	3	3	3	3	3
d) Physical education		3	3	3	1	3	3	1
	Total	11	11	11	9	11	11	9
II. Group for promoting basic education								
a) English		2	2	2	2	3	3	3
b) Mathematics		2	2	-	-	2	-	-
c) Family life education		1	1	3	1	-	2	2
	Total	5	5	5	3	5	5	5
III. Group for promoting knowledge, art and skill								
a) Education		1	2	2	1	2	2	2
b) Education of handicapped children		-	-	-	2	-	-	2

Table 2. The SPG curriculum (cont'd)

Group of subjects	Class Departments	I	II A	II B	II C	III A	III B	III C
III. Group for promoting knowledge, art and skill (cont'd)								
c) Psychology		1	1	1	1	2	2	2
d) Child education		-	1	2	1	1	2	1
e) Psychology of handicapped children		-	-	-	1	-	-	1
f) Didactic and method		1	2	1	2	3	2	2
g) Special method for handicapped children		-	-	-	2	-	-	2
h) School administration		-	-	-	-	1	1	1
i) Practice teaching/leadership		-	2	2	2	4	4	4
j) Bahasa Indonesia		1	1	1	1	2	2	2
k) Local language		2	2	2	2	2	2	2
l) Music		2	1	1	1	2	2	2
m) Drawing/writing		2	2	2	2	-	-	-
n) Handicraft		2	2	2	-	-	-	-
o) Specific education								
i) Agrarian		-						
ii) Technique		-	-	-	2	5	5	4
iii) Maritime education								
iv) Administration/judiciary								
p) Geography		2	1	1	1	-	-	-
q) History		2	1	1	1	-	-	-
r) Arithmetic		2	2	2	2	-	-	-
s) Physical science		6	4	4	3	-	-	-
t) Health		-	-	-	1	-	-	-
	Total	24	24	24	28	24	24	26
	Total number	40	40	40	40	40	40	40

Notes: A - Department of Elementary Education

B - Department of Kindergarten

C - Department of Handicapped Children

From the SPG curriculum presented in Table 2, it can be seen that professional education consists of several subjects: education, education for handicapped children, psychology, child education, psychology of handicapped children, didactic methods, special methods for handicapped children, school administration, practice teaching leadership.

General education and professional education courses are distributed throughout the three years of the student's stay in the SPG. The departments of kindergarten and elementary education provide 83.67% of general education and 16.33% of professional education throughout the three years of work. The students of the department of handicapped children are given 73.33% of general education and 26.67% of professional education.

The curricular programme of the IKIP is divided into three main parts: basic education, professional education, and general knowledge. Each of these parts is organized into a separate department and basic education and professional education represent 40% of the curriculum; the rest comprises 60%.

Student teaching. Practice teaching in the SPG starts in the second year and is given two hours a week. This begins with observation in the co-operating school which lasts for one full quarter. Actual practice teaching is done during the last two quarters of the second year and continues into the third year for four hours a week. The procedures are the same in the IKIP.

The SPG has no laboratory school; practice teaching is done in off-campus co-operating schools which are under the responsibility of the governor of the individual province.

Evaluation. For evaluation the SPG uses objective tests (simple statement, completion, true-false, multiple choice, matching); essay tests (discussion, description, explanation, narration, evaluation); observation of practice teaching and assessment of manual skill. The cumulative records are also used in evaluation.

Evaluation is formally conducted monthly, quarterly, and at the end of the academic year. At the end of the course, the SPG has a State final examination conducted by the State.

Survey of teacher education

Students are assessed monthly by the subject teachers on every subject offered in the curriculum. The results of the monthly assessment are integrated with those of the quarterly test. This quarterly test is an internal one and the results are sent to the parents. At the end of each year the students are given written examinations, the purpose of which is to determine promotion to the next class. During the third year the students are given State examinations which if they pass, they get a diploma.

The system of evaluation takes into consideration the performance of the students in all the subjects taken throughout the three years of their stay in the SPG. It is thus a continuous assessment but the results of the State and the quarterly examinations seem to be the decisive factors. The State examination has a strong influence on the methods of teaching.

Teacher educators

Qualifications. Regular teachers of the SPG are graduates of B-I or B-II courses, or holders of B.A. or M.A. degrees. Any applicant who is knowledgeable in subjects like music, handicraft, or dance may also be appointed. Promotion to the principalship of the SPG requires a master's degree in education or in the Indonesian language and at least 8 years of service in the government.

Recruitment. Selection is done by the Department of Education and Culture. Regular teachers are those who are appointed permanently. Some SPG employ many non-permanent teachers who are paid on the basis of the number of teaching periods. Teacher selection criteria are provided by the Directorate of Teacher Education and Technical Power which stresses that the number of teachers should be twice the number of classes plus one, and the choice should depend on age and experience and suitability of sex for the job. A personal card is to be filed along with the application for appointment, copies of which are kept in the Directorate of Teacher Education and Technical Power and with the Commissioner of Civil Service. This card contains all his qualifications and service and is updated from time to time as he earns promotions. Promotions go not by mere seniority, but by qualifications acquired within service

as well as an efficiency report from the principal and a service test for certain promotions.

The appointment of principal should be proposed and judged by the Regional Teacher Education Office and the Directorate of Teacher Education and Technical Power in Djakarta.

Staff gradations and duties. The most notable aspect in the staffing of the teacher education institutions is that of full-time and part-time employment. Tables 3 and 4 give statistics of teachers, sex and status-wise.

Table 3. Teaching staff of 347 SPG

Status	Sex	Teacher	
		Full-time	Part-time
Public (187)	M	1 568	768
	F	484	126
	NI	0	673
Subsidized (55)	M	295	72
	F	94	17
	NI	5	351
Aided (17)	M	42	115
	F	25	16
	NI	0	0
Private	M	140	-
	F	14	-
	NI	-	521
Total staff		2 667	2 679

Note: NI = No information on sex.
Directorate of Staff and Teacher Education (unpublished)

Table 4. Teaching staff of IKIP

Faculty		Teacher		
		Full-time	Part-time	Total
Education		220	180	400
Teaching of literature and arts		263	339	602
Teaching of social science		326	213	539
Teaching of exact science		190	268	458
Teaching of technical science		98	148	246
Total	a)	1 097	1148	2 245
	b)	1 990	1 398	3 388

Note: a) 1966 data based on 6 IKIP b) 1965-66 figures

In-service education

Every year the Directorate of Teacher Education and Technical Power gives an opportunity to several teachers to raise their educational qualifications, by study either abroad or in the country. A teacher who is employed by the Directorate receives full salary plus allowances for books, equipment, and tuition fee. To meet the emergency requirement for teachers in primary education, it is proposed in the Five-Year Development Plan to utilize the services of surplus civil and armed forces personnel after giving them preparatory training. For teachers of vocational, technical and science subjects, it is proposed to provide guidance and counselling aimed at giving them better qualifications and developing their ability to handle new ideas in the field of education. These will be done through in-service training courses.

Research

The IKIP have each a centre for research in Education - Balai Penjelidikan - and qualified professors to do research. The first Five-Year Development Plan has stressed the need to concentrate on research and direct all research and survey activities towards development programmes. More and more researches will therefore be conducted in the future on problems of social change accompanying and arising out of modernization.

IRAN

Education system

The earliest schools for elementary and higher education before western influence made itself felt in Iran were the Maktab and the Madrasah, which still exist side by side with the modern school. The first mission school was established by American Presbyterians in 1836 and for a time all teaching was in the hands of European instructors. A Ministry of Education was established in 1910. In the following year Parliament passed a law to organize a system of public education, but progress was slow because of lack of funds. In 1922, the first schools for girls were established. At the same time, teacher training institutions (Darul-Moalamat) for training elementary school teachers and a national training college (Da-rul-Moalamein Aali) for training secondary school teachers were organized. The University of Teheran was established in 1933. By 1943, the number of schools and institutes for higher learning had increased considerably and a law was passed introducing free and compulsory education. In 1968-69 the number of elementary schools reached 15,556 with an enrolment of 77.5 %, and general secondary schools numbered 2,067 with an enrolment ratio of 20.5 %. Technical and vocational schools numbered 154; the universities numbered 8, and independent institutes and colleges of higher education numbered 65. Teacher training institutions rose to 111.

Present structure and organization. The structure of education at the beginning of 1970 was as follows:

- Kindergarten (three years), ages 4 to 6;
- Primary school (six years), ages 6 to 12;
- Secondary school (six years), ages 12 to 18: common programme for the first three years, ages 12 to 15; and different streams for the next three years, ages 15 to 18;

Text based on response to the Institute's Questionnaire through the courtesy of the Ministry of Education (Iran) supplemented by information collected from other documents.

- Technical, vocational, agricultural and commercial schools (three or four years), ages 13 to 16 or ages 19 to 22;

- Teacher training institutions, colleges and universities.

Changes have been effected in the above structure which are to be implemented gradually beginning in 1971, consequent to the introduction of the guidance cycle. After kindergarten (three years), elementary education is to be for a period of 8 years, of which five years will be primary education and the next three years, the guidance cycle. The secondary school is to consist of three years' general education programme and four years of special education. After the 8th year of elementary education pupils can move to technical, vocational, agricultural and commercial education or to the normal schools. The school system is still of 12 years' duration, but presents a different pattern e.g. 8(5+3) + 4(3+1).

Private schools aided by the government have contributed substantially to the progress of elementary education in Iran. It is further accelerated by the activities of the Education Corps especially in the rural areas. At present the Education Corps consists of 11,942 young men and women teaching in 7,541 rural schools with approximately 300,000 pupils, 16% of whom are girls. In addition, nearly 100,000 adults attended classes conducted by the Education Corps, 8% of whom were women. Since 1969 women have been recruited to the Education Corps and sent to the villages to teach.

Teacher education

The first teacher training college was established in Teheran towards the year 1919 and was called "Ecole des maîtres" (College for Teachers); later, it came to be known as the "Ecole supérieure des maîtres" (Higher Teacher Training College). The Ecole supérieure des maîtres was later renamed the Ecole normale supérieur (Higher Teacher Training College) and trains teachers in teaching science and arts in the lycées.

Since 1934, teacher education broadened its function to include the training of primary school teachers. A special law was approved concerning conditions of their recruitment, and from 1934, teacher training colleges for preparing primary school teachers began to be set up.

Candidates admitted to the higher teacher training colleges received at the end of their studies the licentiate degree in science or in arts, and those in the primary teacher training institutions who were admitted with the elementary school certificate received the title of primary school teacher after two years of studies.

Changes were introduced, especially in 1960, in the curricula of teacher education for primary and secondary levels. In 1962, sections for the training of principals and professors were created in all higher teacher training colleges. It was stipulated that only holders of the licentiate degree would be admitted to these sections to follow courses on education and methods of teaching for one year in the different branches and teach in the lycées. In another section of the same college, holders of the bachelor's degree were admitted and at the end of two years of studies in the scientific branches they became professors of the first cycle in the lycée. After two years of service the latter could take a special entrance examination for admission in the same college to obtain the licentiate degree after two more years of studies. In 1966, the Ecole normale supérieure confers the licentiate degree to successful candidates after four years of studies.

Management, control and financing. Before 1969 primary teacher training was under the Ministry of National Education and secondary teacher training was under the Ministry of Higher Education. Now all teacher training institutions are under the Ministry of National Education. There are no private teacher training institutions (except one run by a minority group). In the school system, however, there are private schools which benefit from State assistance based on defined rules. In general, assistance is extended to private schools whenever the Ministry of National Education sends qualified teachers to undergo training in these schools.

According to expected outcomes of the new projects, the teacher education centres take into account the quota of private schools in relation to their teacher needs. One of these projects anticipates that each private institution henceforth will be able to present to these centres for training candidates who fulfil the requirements and who will then be engaged by the interested institutions to make up their teaching staff.

Survey of teacher education

The majority of teacher training institutions are run under the form of internships, and their management is based on the principle of the constitution of co-operative societies with the collaboration and direct supervision of the students themselves.

Types, levels and duration. The teacher training colleges in the cities provide a one-year course for elementary school teachers. The minimum qualification for entrance to these centres is 12 years of schooling. Rural teacher training centres provide a two-year course for elementary school teachers in rural areas, and the minimum qualification for entrance is 9 years' schooling. Because of shortage of women teachers, a one-year course is provided for women with a minimum of 6 years' schooling. There are religious normal schools also which provide a one-year course for elementary school teachers who are to teach religious subjects. Admission to these schools require 12 years of schooling. There are tribal normal schools which provide a two-year course for teaching tribal children for which also the minimum qualification for entrance is fixed at 9 years of schooling; but because of shortage of teachers, men and women from among the tribes are selected after 6 years of schooling. The Army of Knowledge (Education Corps) trains young men and women to teach in the villages. The minimum qualification for training is 12 years of schooling. The duration of the course is four months. After 14 months of teaching, those who deserve to continue teaching and have done an outstanding job in the rural area are given another four months' course after which they are employed as regular teachers in the rural areas. In 1969 girls were permitted to enrol in the Education Corps for the first time. [1]

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1. By 1973 the minimum qualification for entrance to all normal schools will become the 8-year elementary school education, and the training period will be extended to four years. This would extend the education of the teacher by one more year, i.e. 8 - 4 instead of 9 - 2.

For women teachers, the training course will be two years after 8 years of schooling. This means that they would have 10 years of schooling in all instead of 7 years as at present. This has become possible because of the expansion of women's education.

The duration of the Army of Knowledge teacher training course has been increased from four to six months, and the duration of their probationary teaching period has also been increased from 14 to 18 months, after which they may be appointed as primary school teachers.

It was in anticipation of the immediate need of the country for primary school teachers that holders of the baccalaureate degree were admitted to a training course for teachers for a duration of one year and were then called to teach in the primary schools. This programme was still in full swing up to last year, especially in the provinces; but owing to the extension of teacher training colleges to the rural and nomadic areas and the towns and the carrying out of the projects of the Army of Knowledge, primary school teachers in the country will soon be recruited among diploma holders from the teacher training colleges.

To train needed teachers for the guidance cycle, special teacher training colleges were established in 1968 and 1969 in the 11 provinces of the country. Holders of the baccalaureate degree are admitted in these teacher training colleges; they will be appointed guidance professors of the first cycle at the end of two years of training in the fields of science, arts and human sciences, foreign languages and in the professions and techniques. Subjects taught during these two years of studies are divided into two groups: general subjects which are at the option of the students and special subjects on which will depend their assignments at the end of their two years of studies.

The training of teachers for secondary schools is taken care of by the higher teacher training colleges (ordinary and technical). These colleges award the licentiate degree, after four years of studies, to young baccalaureate degree holders who were admitted after passing the competitive entrance examination. These graduates become teachers of science, arts or languages in the regular schools and teachers of professions or techniques in the vocational schools, depending on their field of specialization.

The types, number and enrolment of teacher education institutions in operation in 1969-1970 are shown below:

Category	No. of schools	Enrolment
Teacher training colleges for vocational schools	2	174
One-year teacher training	20	1 119
Nomadic teacher training colleges	3	263

Category	No. of schools	Enrolment
Rural teacher training colleges	17	807
Primary teacher training colleges	69	5 288
Teacher training colleges for guidance	11	2 620
Higher teacher training colleges	5	4 352
Higher teacher training colleges of the Army of Knowledge	1	457

The College of Education provides a four-year course of training leading to the B. Ed. degree for elementary school principals or supervisors. The minimum entrance qualification is 12 years of schooling plus 10 years of teaching experience at the elementary school level. It also provides a one-year course for secondary school teachers for which the minimum qualification is the B.A. or B.S.E. degree. A one-year course of training is also given in the College to those with 12 years of schooling and 10 years of teaching experience at the elementary level to prepare them as school masters. A four-year course of training is given also to teachers (regular) leading to the B.S. degree, with a minimum qualification of 13 years' schooling plus 8 months' training and four years of teaching experience (14 months in army service and three years as a regular teacher). This would enable them to become supervisors. It further provides a two-year course of training for the M. Ed. degree to prepare supervisors and guidance workers for the new school system. The minimum qualification for admission is the B.S. degree.

The university provides a four-year course leading to the B. Ed. degree for teachers in teacher training centres or high schools.

The following institutes of higher learning in Iran offer teacher training courses:

	Degree awarded
1. University of Tabriz - Teacher Training Department	B.A.
2. University of Isfahan - Teacher Training Department	B.A.
3. University of Jundi Shapour - Teacher Training Department	B.A.

	Degree awarded
4. University of Meshed - Teacher Training Department	B. A.
5. Tehran Teachers' College	B. A. and M. A.
6. Literacy Corps Teachers College	A. A. and B. A.
7. Girls' Superior College	A. A.

In general, student-teachers finishing at the nomadic teacher training colleges are assigned as itinerant teachers in the nomadic primary schools, moving about in summer and in winter with the tribes to ensure continuity of the courses. The teachers are, in general, chosen among the members of the tribes themselves. The duration of studies in these nomadic teacher training colleges is one year.

Student-teachers finishing at the rural teacher training colleges are called to teach in the small primary schools in the rural regions.

In primary teacher training colleges, student-teachers undergo training for two years. At the end of their studies, they are assigned to teach in the primary schools located in the cities. The diploma they receive is equivalent to the baccalaureate degree.

Studies in the teacher training colleges for the teaching of guidance last for two years. Holders of the baccalaureate degree are qualified to follow these studies after which they are awarded a diploma that is higher than the baccalaureate but lower than the licentiate degree. Teachers who finish these studies are appointed to teach guidance courses. The duration of training in the higher teacher training colleges is four years and at the end of their studies, a diploma equivalent to the licentiate degree is awarded to candidates who have successfully passed the tests in the field of their specialization.

Admission and enrolment. To be admitted to the rural or nomadic teacher training colleges, the candidates must have finished at least the first six years in the primary grades or

more. In the beginning of this year, the minimum requirement was raised to the elementary certificate. Candidates are chosen, according to the needs of each region, after having taken and passed the competitive entrance examination and an oral interview.

Candidates seeking admission to the primary teacher training colleges must be holders of the elementary certificate, and must submit themselves to a competitive entrance examination and an oral interview.

The number of candidates for each region is determined, in general, according to the needs of the region. Candidates are recruited most often from among the applicants of the region itself where they would be assigned to teach.

In the teacher training colleges for the teaching of guidance, the candidates are selected only after their having taken the competitive entrance examination and the oral interview. The competitive entrance examination consists of general and special subjects. General subjects include an intelligence test, Persian language tests and a series of general knowledge tests. The special subject tests are based on the subjects the candidate desires to take during the period of his studies.

In the higher teacher training colleges, only candidates with the baccalaureate degree who pass the competitive entrance examination given by the universities in the field of education are admitted.

A variety of courses are offered at the higher training institutes which include, in general, such subjects as bookkeeping, home economics, physics, chemistry, natural sciences, mathematics, Persian, English, biology, pedagogy, physical education, literature, elementary pedagogy, guidance and counselling and child-nursing.

According to recent statistics 2,150 students studied pedagogy. Of these 366 (17.02 %) were attending courses leading to A. A. ; 1593 (74.09 %) were attending courses leading to B. A.; and 191 (8.89 %) were attending courses leading to M. A.

The distribution of the students according to various other courses is as follows :

Course	Number of students	Percentage
1. Physical education	554	25.77
2. Education	1 232	57.30
3. Other courses	364	16.93
Total	2 150	100

The figures in the above table show that nearly one-fourth of students attended courses in physical education. The percentage of the pedagogy students relative to the total number of the students at universities and institutes of higher learning was 3.20%.

Number of students and graduates from teacher training colleges and other teacher training institutions from 1966-1967 to 1968-1969

	Students enrolled			Students graduated		
Year	Female	Male	Total	Female	Male	Total
1966-67	311	1 120	1 431	55	222	277
1967-68	505	1 567	2 072	22	106	128
1968-69	043	2 795	3 838	54	354	408

In 1969-70, student enrolment was 1,562 female, 3,541 male, totalling 5,103.

The tables summarizing student enrolment during the years 1967-68 to 1969-70, in each type of institutions and the number graduated, appear on pages 136 and 137.

Student aid. Studies in the teacher training colleges are free and in those which are on internship basis, fees are paid for by the government. In the past, student-teachers in the higher teacher training colleges received allowance and were appointed in turn to become teachers in the Ministry of National Education. This allowance has since been discontinued.

Facilities. Teacher training schools and teacher education institutions are fairly provided with buildings and appropriate facilities. In certain institutions of teacher education recently created, buildings and equipment are still at the developmental stage, but the construction of buildings for future projects especially intended for teacher training colleges provided with necessary facilities has been anticipated.

Table 1. Statistics on student enrolment in teacher training institutions
(Affiliated to the Ministry of National Education)
in three consecutive years

Type of teacher training institutions	No. of schools	Student enrolment		
		Men	Women	Total
1967-1968				
Primary teacher training (governmental)	92	332	6 349	6 681
Secondary teacher training (duration: two years after the Baccalaureate)	-	-	-	-
Teacher training colleges and other institutions for training of teachers	6	1 567	505	2 072
Primary teacher training (non-governmental)	1	12	-	12
1968-1969				
Primary teacher training (governmental)	102	368	5 548	9 516
Secondary teacher training (duration: two years after the Baccalaureate)	2	37	97	134
Teacher training colleges and centres for training of teachers	-	-	-	-
Primary teacher training (non-governmental)	1	9	(-1)	9
1969-1970				
Primary teacher training (governmental)	109	967	5 510	6 477
Secondary teacher training (duration: two years after the Baccalaureate)	13	1 771	1 023	2 794
Teacher training colleges and centres for training of teachers	-	-	-	-
Primary teacher training (non-governmental)	1	4	-	4

Table 2. Number of students who have completed their studies in three consecutive years

Types of teacher training institutions	Men	Women	Total
1966-1967			
Primary teacher training	197	3 903	4 100
Secondary teacher training	-	-	-
Teacher training colleges and other institutions for training of teachers	222	55	277
1967-1968			
Primary teacher training	252	4 713	4 965
Secondary teacher training	-	-	-
Teacher training colleges and other institutions for training of teachers	106	22	128
1968-1969			
Primary teacher training	239	3 261	3 500
Secondary teacher training	-	-	-
Teacher training colleges and other institutions for training of teachers	-	-	-

The possibility of having "complete" or "comprehensive" teacher training colleges for the training of primary teachers and teachers of guidance and professors of lycées is foreseen. For these teacher training colleges, the planning of appropriate buildings provided with the necessary equipment, adequate classrooms, libraries, lecture rooms, and space necessary for students' associations, educational activities and experimental classes for practice teaching is contemplated. A certain number of teacher education institutions already enjoy such facilities.

Organization of instruction. Class size in institutions for training primary-level teachers varies between 29 and 37 and in those for the secondary-level teachers between 40 and 50. Teacher-student ratio is roughly 1:35 in the institutions for primary teacher training and 1:30 in the institutions for secondary teacher training. There are fewer professors than needed, so the full-time professors have to work 36 hours and

part-time professors, 22 hours a week. The normal schools and teacher training colleges are organized into three different departments: Mathematics, Science, and Letters. The University Department of Education is not organized in the same way. The lecture, group discussion, and seminar are the methods usually used.

Curriculum. The Ministry of National Education prepares the curricula of teacher education institutions and those of the rural and nomadic schools, primary schools, and teacher training schools for the teaching of guidance. Modifications are introduced from time to time as indicated by the results of evaluation and research. The new system of education necessitates changes in the curricula of the teachers' colleges for primary level training and of the schools for the teaching of guidance.

In conformity with the level of studies of candidates, curricula in the colleges for nomadic, rural and primary teacher training consist of a series of general subjects compulsory for all, namely: psychology and education, Persian literature, mathematics, experimental science, civics, religion, foreign language, physical education, gymnastics, arts and practical work, the making of teaching materials and practical courses.

The following chart gives the curriculum of the one-year course of teacher training centres in the cities:

Subject	Weekly unit	One-year unit
Persian language and methods of teaching and children's literature	7	224
Organization of libraries	1	32
Mathematics and geometry and methods of teaching	4	128
Principles of instruction in elementary schools	2	64
Child psychology and educational psychology	2	64
Science and hygiene and methods of teaching	2	64
History, geography, and civics education	3	96

Subject	Weekly unit	One-year unit
First aid	1	32
Sports	2	64
Music	1	32
Preparation and use of instructional materials	1	32
Drafting and painting	1	32
Scouting	1	32
Koran and religious principles	2	64
Teaching practice	6	192
Total	36	1 192

Note: This curriculum is based on 36 units (hours) weekly for 32 weeks. The curriculum of other teacher training centres is more or less the same. In rural teacher training centres, the emphasis is on rural, agricultural problems; in the religious centres, on religious problems; and in the tribal training centres, on tribal problems.

There are semestral examinations and practice teaching before the end of the second semester.

Studies in the teacher training colleges for the teaching of guidance consist of general and special subjects. General subjects are compulsory for all and consist of educational science, history of education, principles of school guidance, Persian literature, Persian language, Arabic, religious instruction, physical education and gymnastics, foreign language and social sciences. The special subjects are divided into four groups: mathematics and experimental science, arts and human sciences, foreign language, and professional and technical knowledge. Students follow the courses belonging to any group which are related to their field of specialization.

In the higher teacher training colleges, each student participates in a course that forms part of his field of specialization, namely: physics and chemistry, mathematics, sciences, Persian literature, history and geography, foreign language, etc., but all are required to attend courses on education and methods of teaching. In the practical courses, students teach

subjects in which they are specializing. Teacher training curricula are the same for the entire country.

Student teaching. In the one-year course at the teacher training centres in the cities, practice teaching is organized in the second semester. During the first year of teaching, the graduates of teacher training centres are helped by supervisors who observe them in their classrooms, take notes and fill the prescribed forms. At the end of the first year, the work of the students is evaluated by a group which includes the director of the teacher training centre, the principals of the schools where they teach, the chief of the Teacher Training Office, and the respective supervisors. If they get a good score (40 % at least), they are employed; otherwise they have to leave the Ministry of Education or go back to the teacher training centres and study again.

In the tribal schools the supervisors visit the schools, and the inexperienced teachers are helped by the qualified ones. The unqualified teachers are given further courses of training in the summer vacation.

Students of institutions for primary teacher training are required to proceed to practice teaching under the supervision of competent professors in educational science. Under methods of teaching, the students learn how to make use of teaching materials effectively. There is no attached practising school to any teacher training institution, and so practice teaching which takes the form of observation and guidance of class professors is done in co-operating schools.

Student-teachers of the Higher Teachers Colleges do some teaching work along with the study of their subjects of specialization during the first year of their practice in schools on a trial and error basis. They are not definitely and officially engaged to work, but if their work is satisfactory their experimental year is counted as part of their entry into the teaching profession.

Evaluation. In all the teacher training colleges, examinations are given during the course and at the end of the academic year to decide student promotion. Official examinations which are given during the last year of studies for each category are

identical in all the teacher training colleges of the country. Written tests are given for certain subjects, while for others it may be oral or both written and oral.

In the Higher Teacher Training Colleges, examinations are given during the four years of studies in conformity with the rules of the universities. The final rating is based on the different tests taken by the candidate during his four years of studies.

Teacher educators

Qualifications. In the institutions for primary teacher training, professors are, in general, holders of the licentiate degree and are employed as government officials. In the Higher Teacher Training Colleges, professors are holders of a doctorate or master's degree in their respective fields. The recruitment of professors in institutions for secondary teacher training is generally from candidates who have received their training from abroad, but even this has not always worked out satisfactorily because many of them lack teaching experience. To meet deficiencies or upgrade the qualifications of professors of primary teacher training institutions, summer classes are arranged.

Recruitment. Teacher training institutions, being all governmental, recruit their staffs solely as employees of the State by the Ministry of National Education. In 1968-1969 there were 390 instructional staff in the institutions for primary teacher training, of which 188 were men and 202 were women. Some secondary school teachers were also employed as part-time instructors. Part-time professors teach in higher teacher training colleges also, though most of them are full-time.

Staff gradations and duties. Principals and professors of the training institutions are all engaged in teaching and supervision of student teaching.

In-service education

Training periods and in-service training courses are regularly organized for primary-level teachers and the professors at the second level. These courses take place either during the free time of the teachers or during the summer vacation, at the

regional or national level. These courses enable the participants to know the latest developments in the scientific, social and educational fields. With the introduction of the new system of education, training courses have been organized during the last four years, principally for mathematics, sciences and social sciences. The organization of in-service training courses will be certified by an official diploma to permit the participants to get promoted to higher ranks in their career.

A big step has equally been taken in order to allow teachers practising in the rural regions to follow and to complete their studies by correspondence, thanks to the facilities offered to them by the Higher Teacher Training Colleges of the Army of Knowledge.

In addition, refresher courses and seminars are organized for principals, school supervisors and educational advisers.

The Department of Studies and Curriculum in the Ministry of National Education is responsible for the preparation of the curricula of teacher education institutions and matters relating to research. To this end, it is in direct contact with the offices and personalities concerned. Seminars or short courses are often organized with the participation of professors of teacher training institutions, to discuss questions pertaining to teacher education. Reports from different institutions relating to curricula and statutes and regulations in these institutions are studied, discussed and evaluated during these meetings.

Research

In the Higher Teacher Training Colleges in Teheran, an Institute of Educational Research has been established to study questions relating to teacher training. In the Higher Teacher Training Colleges in the provinces, measures of this kind are being adopted depending on available facilities.

JAPAN

Structure and organization

The structure of the education system at present is as follows: (1) nursery schools and kindergartens at the pre-school level, (2) elementary schools and lower secondary schools, (3) upper secondary schools, (4) junior colleges, (5) teachers' colleges and (6) universities.

The duration of compulsory education is 9 years from the age of 6 to 15, which covers 6 years of elementary school education and three years of lower secondary education. The upper secondary stage is of three years' duration, but the course can also be covered by correspondence education or part-time education in four years. There is diversification at this stage. Students may enter technical colleges after the ninth year of schooling for courses of five years' duration. Special schools for the handicapped are provided at this stage. Beyond the upper secondary school higher education is provided by junior colleges of two to three years' duration. The drop-out rate in schools is significantly low. The proportion of lower secondary graduates entering upper secondary schools was 76.76 % in 1968. 82 % of students in junior colleges and 18 % of the total number of students in the university in 1970 were women.

From 1961 students enrolled in part-time training or correspondence education at upper secondary schools may currently receive organized instruction in training centres within the industrial establishments or vocational training centres, and this is recognized as equivalent to similar courses offered in upper secondary schools.

Text based on response to the Institute's Questionnaire through the courtesy of the Ministry of Education (Japan) supplemented by information collected from other documents.

Survey of teacher education

Private universities are playing an important role in higher education in Japan. The number of students in private universities is more than 72 % of all university students.

Education with the use of audio-visual teaching materials has spread all over the country and from 1968 local audio-visual libraries have been subsidized to provide films, slide projectors and recorders.

A variety of educational programmes on radio and television are presented by the Japan Broadcasting Corporation and other broadcasting establishments and these are utilized by local schools. In order to promote systematic use of television programmes in classrooms, small-sized video-tape recorders are being used effectively in a large number of schools. 8 mm. films produced by teachers themselves, overhead projectors, teaching machines, language laboratories, and closed circuit television are increasingly used for instruction in upper secondary schools and higher education institutes. The textbooks used in the elementary and secondary schools are limited to those authorized and controlled by the Ministry of Education.

In 1968-69 the Ministry of Education began to give subsidies to the upper secondary schools with science and mathematics courses for the improvement of school facilities and equipment in industrial education. Assistance given to private institutes was also considerably increased. Local governments are given subsidies for the construction of swimming pools, camping sites, public gymnasiums, and training facilities for Judo and Kendo (Japanese fencing). In 1971 schools providing lunch services formed 97 % in elementary schools and 86.1 % in lower secondary schools. 93.2 % of the total enrolment in these schools were benefitting from it. Free distribution of textbooks has also been expanded to cover all pupils receiving compulsory education. School children in need of financial assistance are provided also with education allowance, or grants-in-aid to cover expenses for school supplies, transport, school lunch, excursions, medical care etc.

Management, control and financing

The educational administrative organs in Japan are the Ministry of Education at the national level, and the Prefectural and Municipal Boards at the local level. The Ministry of

Education, as the Central Education Authority, is responsible for the promotion and diffusion of school education and out-of-school education.

The Education Personnel Training Division is in charge of teacher education. The other divisions of the Education Department are the Elementary Education Division, Lower Secondary Education Division, Upper Secondary Education Division, and the Higher Education and Science Bureau. Private education institutes are under the Private Schools Promotion Division.

The main functions of the Ministry of Education are: (i) to establish national standards for the establishment, organization and curriculum of various kinds of schools; (ii) to authorize the textbooks to be used in elementary and secondary schools; (iii) to provide guidance and advice for the local public bodies and the local boards of education. Each local body organizes a board of education as the agency responsible for carrying out its educational services within the area.

At the pre-school level, the kindergartens are under the jurisdiction of the Ministry of Education, while the nursery schools are under the Ministry of Health and Welfare. Public elementary and lower secondary schools are the responsibilities of the municipal boards of education. Public upper secondary schools are the responsibility of prefectural boards of education. Private schools are controlled by the chief of the local government.

The Minister of Education is responsible for the establishment and abolition of national universities and junior colleges while the chiefs of the local governments are responsible for starting and maintaining public universities and junior colleges. The establishment of national, local public or private universities or junior colleges in all cases requires the approval of the Minister of Education who is guided by the University Chartering Council in this matter. Each university is governed by its own governing body, but the personnel of a national university or junior college is under the control of the Minister of Education, while that of the local public universities or junior colleges is under the local public body. There are a few national upper secondary schools attached to national universities. These are also under the control of the Minister of Education.

Survey of teacher education

Every national institution is financed directly by government grants. Subsidies for research facilities and personnel expenses are granted by the Government to the private institutions.

The Ministry of Education had a budget of 788,868,000,000 yen for the fiscal year 1969-70, which represents an increase of 12.1% over the previous year. Much of it was for giving increased subsidies to private institutions consequent to the new provision to subsidize operational expenses for research undertaken by the teaching staff in these institutions.

Types, levels and duration. Teacher training in Japan is generally carried out at the university and junior college level. While national universities of education and faculties of education offering teacher training courses mainly train elementary and lower secondary teachers, other national and local public or private universities and junior colleges, with the approval of the Minister of Education, are also authorized to issue teacher's certificates to those students who have acquired the prescribed number of credits as provided for by the Educational Personnel Certification Law. As of 1970, 764 universities and junior colleges, or approximately 88% of the total number, provide teacher training courses. As many as 123,000 students obtained teacher's certificates at the time of graduation in March 1970, of whom 10% are graduates from national universities of education and faculties of education. This means that about 40% of all the graduates from those approved universities and junior colleges acquired teacher's certificates. About 30,000 graduates, or about 25% of those who acquired teacher's certificates have entered into the teaching profession, of whom 40% are graduates from national universities of education or faculties of education.

There are 47 teacher training institutions preparing primary school teachers and teachers of general secondary schools, of which 46 are national, and one private. One national teacher training institution is located in each of the 46 prefectures and the universities and junior colleges are scattered all over the country. Hence the rural areas are adequately served.

Teacher training courses comprise the following: courses for primary teachers, lower secondary teachers, upper

secondary teachers for special subjects, teachers for schools for the blind, deaf and handicapped, and kindergarten teachers.

At present the graduates of junior colleges are also given the second class certificate for primary and lower secondary school, although it is now considered that a uniform first class certificate only should be given to graduates of the four-year university course. The demand for graduates of the two-year junior colleges is so great at present that it is difficult to do so.

The types of teacher's certificates, together with the minimum requirements for each is given in Table 1 below.

Table 1. Types of teacher's certificates with minimum requirements

School level	Class of certificate	Levels of academic attainment	Minimum credit requirements			
			Total	General education	Teaching subjects	Professional subjects
Elementary school teacher	2nd class	2 years beyond upper secondary school	62	18	8	22
	1st class	Bachelor's degree	124	36	16	32
Lower secondary school teacher	2nd class	2 years beyond upper secondary school	62	18	A 20 B 16	14
	1st class	Bachelor's degree	124	36	A 40 B 32	14
Upper secondary school teacher	2nd class	Bachelor's degree	124	36	A 40 B 32	14
	1st class	Master's degree or one year beyond bachelor's degree	154	36	A 62 B 52	14
Kindergarten teacher	2nd class	2 years beyond upper secondary school	62	18	8	18
	1st class	Bachelor's degree	24	36	16	28

Certification requirements vary with the school level. Teacher's certificates for kindergartens and elementary schools are for all subjects; those for lower and upper secondary schools are for specified subject areas.

Teacher's certificates are classified as regular and emergency. The former are subdivided into first and second class certificates. Persons who hold regular certificates are qualified for full teaching duties and those who have emergency certificates can be assistant teachers only. There is no great economic or legal distinction between teachers holding first and second class certificates.

Emergency certificates for kindergarten, elementary and lower secondary teachers are granted to upper secondary school graduates (or the equivalent) who have passed educational personnel examinations conducted under prefectural auspices.

Second class certificates for kindergarten, elementary and lower secondary teachers and emergency certificates for upper secondary teachers are granted to junior college graduates (or the equivalent).

Survey of teacher education

First class certificates for kindergarten, elementary and lower secondary teachers are granted to university graduates (or the equivalent). First class certificates for upper secondary are granted to graduates who have earned the required additional number of credits for a Master's degree.

Teachers seeking higher class certificates must earn the additional credits and must have served for the prescribed number of years with good records as school teachers. The required credits may be acquired through in-service training (e. g. correspondence and other off-campus courses approved by the Minister of Education), and by attending regular university courses.

The first graduate school in a teacher training institution was set up in 1966 by the Tokyo Gakugei University. Osaka University of Education established the second graduate school in 1968. These graduate schools aim at training teachers and researchers in the different subjects which are taught in elementary and secondary schools; train leading personnel at the compulsory education level and provide school teachers with opportunities for systematic in-service training and research.

From 1964-65 the Ministry of Education introduced in every teacher training faculty new courses for the training of special school teachers in charge of mentally retarded children. By 1971 more than 35 to 46 national teacher training faculties had set up this course. There is no shortage of teachers in general, though there is a shortage in subjects like science and mathematics. To meet this situation it is proposed to establish special teacher training courses in national universities. During 1969, mathematics training courses were set up in 13 universities.

Admission and enrolment. For admission to institutions for primary teacher training, the average final grade in the secondary school is considered, but not the rank or grade in final examinations. A certificate of good character from the principal of the upper secondary school is also considered. There is no interview. Admission tests are given. These are objective tests and subjective tests in several subjects. A medical examination is conducted to check whether applicants are healthy enough physically and mentally to continue the study.

For the secondary teacher training programme, the final grade in secondary school is also taken into consideration, but not the rank in any final examination. A certificate of good character from the principal of the upper secondary school is required. There is no interview. Admission tests and medical examination are required as in the case of entrance to primary teaching institutions.

The previous schooling required for entrance to primary teacher training is 6 years of primary school and three years of secondary education and two to four years of upper secondary education. For secondary teacher training, the previous schooling required is the same. The duration of training is four years in a university. The duration and degree awarded to both primary and secondary teacher training are becoming gradually the same. There is no age limit for admission.

Enrolment figures for the years 1968-1970 for primary and secondary teacher training and the number graduated in 1968 and 1969 are given below in Tables 2 and 3.

Table 2. Number of students enrolled in 1968, 1969 and 1970

Type of teacher training institutions	Number of students enrolled								
	1968			1969			1970		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	3 772	5 208	8 980	3 672	5 233	8 905	3 788	5 545	9 333
Secondary teacher training	2 337	1 980	4 317	2 202	2 016	4 218	2 106	1 925	4 031

Table 3. Number of students graduated in 1967, 1968 and 1969

Type of teacher training institutions	Number of students graduated								
	1967			1968			1969		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training			12 683	2 839	3 638	6 477	3 253	4 444	7 697
Secondary teacher training				3 057	2 557	5 613	2 413	2 046	4 454

The number of those who take courses in such subjects as mathematics, science, arts and physical education is rather small and their desire to work in larger cities makes it difficult to secure the balanced distribution of teachers in those subjects.

Student aid. Loan scholarships from the Japan Scholarship Foundation are given to those students who need them. At present 37.1% of the students of the teacher training institutions enjoy this benefit. The repayment of the loan will only be from those students who do not opt for teaching at least for two years after graduation.

Organization of instruction. Eighteen of the teacher training institutions have an enrolment of between 500-1,000; 21 have between 1,000 and 2,000; four have more than 3,000.

The class size in all institutions ranges between 10-50. It is regulated so from the point of view of effective instruction. The teacher-student ratio is 1:9 or 10 in all institutions. Lectures are given by regular professors, assistant professors and lecturers. No part-time lecturers are appointed though quite often resource persons from outside are employed for specific work. Teachers normally teach 13 hours a week, which is considered a full load. Faculty members with administrative duties do not teach and those with supervisory responsibilities take a smaller teaching load.

There is no departmental organization in any institution, nor in the education departments in the universities.

Curriculum. The preparation of the curriculum is done by the universities. Local authorities have no influence in drawing up the curriculum. There are three subject groups in the curriculum: general education subjects, teaching subjects, and professional subjects. The curriculum in the different universities may not be uniform. "Teaching subject" means the subject in which the prospective teacher specializes. The minimum number of credits for teaching subjects varies according to the subject areas which the prospective secondary teacher will teach. "Professional subjects" include the theory of pedagogy, pedagogical psychology, teaching methods, etc.

Student teaching. All the teacher training institutions, whether primary or secondary, have practising schools attached to them and 270 hours are spent by the student-teacher in the attached schools, or 180 hours in co-operating schools in the case of those being trained for secondary school teaching. A student is free to do his practice teaching in any school of his choice and not necessarily in the attached practising school.

The student training programme includes classroom management, management of schools, curriculum planning and guidance, guidance of study, guidance and consultancy for pupils, school safety, school health etc.

Evaluation. In order to obtain a teacher's certificate, the student has to acquire the prescribed number of credits in each subject group: general education subjects, teaching subjects and professional subjects. A lecture class of one hour a week requiring two hours of student preparation and of 15 weeks' duration, yields one credit. A seminar class of two hours a week for 15 weeks, requiring one hour of student preparation, yields one credit. Practice classes require three hours per week for 15 weeks to get one credit. Assessment of both theoretical subjects and practice teaching is internal.

Teacher educators

Qualifications. The following are the qualifications of the instructional staff. A professor should have a Ph. D. degree, or academic achievements which are equal to a Ph. D., previous

experience of being a professor or assistant professor and substantial merits in the specific field of study. An assistant professor should have the qualifications required for professorship, except that he may perhaps have an M. A. degree only, and experience of having been an assistant professor, or a full-time lecturer at the university for more than three years and have substantial merits in the specific field of study. Lecturers are also required to have equivalent qualifications to professors or assistant professors, but may not have as much an experience.

Recruitment. Teacher educators employed by the national government are all national public officials and they are governed by the National Public Service Law. However, their status is distinct from that of public officials and regulated by the Law of Special Relations concerning Educational Personnel. Appointment procedures are described in the Law of Special Relations Concerning Educational Personnel.

The appointment and training of the professional staff of the university are made by the Minister of Education on the basis of the decision of the faculty meeting of the university.

In-service education

In-service education is not considered a function of the teacher training institutions, but that of the Ministry of Education and the local Boards of Education.

The Ministry of Education utilizes the National Education Centre, established in 1964, for in-service training of teachers and sometimes lends part of the faculty to major organizations to promote their activities in educational research and studies. It also subsidizes activities of voluntary groups for educational studies which play a substantial role in improving elementary and secondary education.

In order to encourage local efforts for in-service training of local education, the Ministry gives subsidies to prefectures for the construction of in-service centres for research and to educational study groups, voluntarily organized by

school teachers. Some universities and industrial enterprises co-operate in offering in-service training of teachers in science and technical subjects.

A seminar for unqualified teachers to acquire the prescribed number of credits is held at an appropriate university for a month or so in the summer vacation.

Under the sponsorship of the Ministry of Education or Prefectural Boards of Education, the training courses for teachers and principals are being provided regularly.

Study abroad programmes are provided for leading teachers and principals of elementary and secondary schools to give them a broader view and understanding of the teaching profession. In 1970, five hundred teachers and principals were on the list to be sent abroad for this purpose for 50 days.

Research

Research is conducted by instructors and professors, individually and co-operatively, in the teacher training institutions, whether primary or secondary. It is also done by research departments.

Co-operative studies are undertaken involving other institutions, including attached schools. Usually studies are regularly made on the curriculum and subject teaching methods. The funding for research expenses is being increased to encourage research.

The researcher is given time, extra compensation, and sabbatical leave and provided with clerical help. Publication of the study is done by the institution. Government assistance is given for studies, depending on their purpose and nature. This assistance is given both to institutions and individuals.

In 1962-1970, sixteen lower secondary schools were designated by the Ministry of Education to conduct experimental studies on new teaching methods, including the use of teaching machines, and grants were provided for the purpose. The Ministry of Education itself conducts many investigations on

educational problems such as youth delinquency, student unrest, problems of class organizations, teacher allocation, provision of equipment etc., taking large samples of schools. Other problems investigated include family and social conditions, academic achievements of school graduates, possibilities of out-of-school education, etc. To obtain basic data for the supply-and-demand programme of schools and students, the Ministry of Education conducts also an investigation into the composition of schools and students every three or four years.

In 1968, an electronic computer was introduced in the Ministry of Education for data processing and analyses of the educational research and investigations.

KHMER REPUBLIC

Education system

Structure and organization. In the Khmer Republic, the educational structure comprises 6 years of primary education and 6 years of secondary education. In grades VII and VIII, subjects like wood-work, metalwork, agriculture, livestock raising are introduced as practical activities. These activities are intended to explore the aptitudes of pupils and help them to elect their courses in the next grade.

The present curriculum is designed to cater to the needs of the country for turning out agents of production in both industrial and agricultural areas. Its success depends upon teachers with the right quality. Although the number of teachers continues to increase, the shortage of teachers is still a serious problem. It has not been possible to replace foreigners who teach science subjects. Retraining courses had to be given even to primary-grade teachers to teach the new curriculum with practical activities in grades V and VI. For the "guidance cycle", the Faculty of Education, with assistance from the University of Agricultural Science and the Royal Technical University, is now training teachers for each specialized field.

Beginning with the first year of application of the new programme, secondary teachers have received some training in observation techniques, and talks have been given for teachers, pupils and parents. A guidance council has also been set up at each secondary school with the participation of teachers, parents, doctors and psycho-technicians.

Teacher education

In the past, students intending to be primary school teachers followed a one-year professional education course in the

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Text based on response to the Institute's questionnaire through the courtesy of the Ministry of Education (Khmer Republic) supplemented by information from other documents.

higher primary section after finishing a four-year general education course. In 1957, the Centre de préparation pédagogique (Centre of Teacher Preparation) was opened and admitted only students for teacher training. Later in the same year, a teacher training school was established at Kompong Kantuot 34 kilometres from the city of Phnom-Penh. Student-teachers of the Centre de Kompong Kantuot underwent training from grade VI to that of the Diplôme d'études secondaires du ler cycle (Diploma of Secondary Studies, First Cycle) - four years of general education and professional education courses.

In 1965, a Centre de formation des instituteurs (Centre of Primary Teacher Training) was opened at Tonle Bati which recruited student-teachers with the Diplôme d'études secondaires du ler cycle for a purely professional emergency training course to meet the urgent needs for primary-level teachers in the country. The duration of training was one year.

In 1958, the Institut national pédagogique (National Institute of Pedagogy) was opened for training secondary teachers of the first cycle (two-year training for holders of the Baccalauréat first part and one-year training for the holders of the Baccalauréat second part). In 1965, this institute was transformed into a Faculté de pédagogie (Faculty of Pedagogy), which was to be hereafter the agency responsible for teacher education and the administration of teacher training colleges of the country (the Centre de préparation pédagogique de Kompong Kantuot and the Centre de formation des instituteurs de Phnom-Penh et de Tonlé Bati), and for training secondary teachers of the first cycle.

In 1966, the Centre de Kompong Kantuot's four-year training course was reduced to one year and students were recruited either at the beginning of grade VI or at the level of the Diplôme d'études secondaires du ler cycle. A year later, on account of the growing number of holders of the bachelor's degree, the condition for admission to the different primary teacher training institutions was fixed at the level of the Baccalauréat (first part).

The Ecole normale supérieure (Higher Teacher Training College) took charge of the training of the teachers of the second cycle.

Management, control and financing. In the Khmer Republic, the overall control of education is the responsibility of the Director-General of Education who works under the Ministry of Education. The Director of Teacher Training works under the Director of Higher Education. Each teacher education institution is administered by a director. The supervision of public institutions with regard to their operation, methods of appointment, curricula, examinations and awards of diplomas falls within the competence of the Dean of the Faculté de pédagogie who is responsible to the Rector of the University.

All teacher education institutions are governmental, and their expenses are covered by the national budget.

Types, levels and duration. In Phnom-Penh, there are two government primary teacher training institutions: the Centre de préparation pédagogique de Phnom-Penh and the Centre de formation des instituteurs de Tonlé Bati which was transferred to the capital two years ago to facilitate recruitment of teachers. These two institutions train student-teachers recruited at the level of the Baccalauréat (first part) for one year. With the transformation of the Centre de formation de Kompong Kantuot to the same type of institution in 1966, the last two institutions serve both the urban and rural regions of the country. The duration of the training of primary teachers of the supplementary degree is one year and the duration of the training of professors of the first cycle is also one year. [1]

At the end of the professional training, student-teachers in primary-level teaching receive the Certificat d'aptitude pédagogique (Certificate of Proficiency in Teaching) and teach in the primary schools; student professors receive the Diplôme de professorat (Diploma of Professorship) and teach in the secondary institutions of the first cycle. Actually, the former must be holders of the Baccalauréat (first part) and the latter the Baccalauréat (second part). Their admission to the Faculté de pédagogie is by competitive examination. To be appointed a secondary professor of the second cycle, a person must have the Diplôme de licence (Licentiate's Degree) and attend the professional training courses of the Ecole normale supérieure.

1. The duration of the training courses has been increased from 1970-71.

Facilities

The Centre de formation des instituteurs de Phnom-Penh occupies three buildings of two storeys having 26 classes for a total enrolment of 500 students; lawns and recreation yards are well distributed. Provision is only for common classes or general lecture rooms. There are no specialized rooms like music rooms, art rooms and auditoriums. Libraries and laboratories are fairly well equipped.

Equipment is adequate at the Centre de Kompong Kantuot but not so adequate at the Centre de formation des instituteurs de Phnom-Penh. The Faculté de pédagogie for the training of secondary teachers is well equipped, but even here not as well equipped as in the Centre de Kompong Kantuot.

There are language laboratories and research centres at the Faculty of Letters which the student-teachers may utilize at fixed hours.

Student-professors and student-teachers form an Association of Students of the Faculté de pédagogie. Its Committee is directed by a student elected as President of the Association for the duration of an academic year. This Committee meets from time to time to plan activities, for example sport activities and paramilitary activities.

Admission and enrolment. The minimum admission requirements of pre-service trainees in primary and secondary teacher training institutions are as follows: 12 years of schooling, or at the level of the Baccalauréat (first part) for student-teachers in primary education and 13 years of general education or at the level of the Baccalauréat (second part) for secondary teachers of the first cycle. The average grade in examinations required is 10 out of 20 maximum grade points, and the age limit is from 18 to 25 years.

Enrolment figures for the last three years are given in Tables 1 and 2. The number of teachers who completed in-service training in 1968-69 and 1969-70 are given in Table 3.

Table 1. Enrolment of in-service teachers

Level	1967-68			1968-69			1969-70		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Primary teacher training	16 582	2 557	19 139	16 776	2 655	19 431	18 226	2 795	21 021
Secondary teacher training	2 722	533	3 255	2 738	519	3 257	-	-	4 148
Higher teacher training	771	103	874	1 057	143	1 200	-	-	1 228

Note: Statistical reports presented by the Office of National Planning.

Table 2. Enrolment of student-teachers and student-professors trained annually

Types of teacher education institutions	1967-68			1968-69			1969-70		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Primary teacher training									
Centre de préparation pédagogique de Phnom-Penh	576	74	650	1 289	212	1 501	352	47	399
Centre de Kompong Kantuot	617	83	700	391	51	442	278	35	312
Centre de Toulé Bati									
Secondary teacher training									
Professeur, First Cycle	323	39	362	423	74	497	182	20	202
Professeur, Second Cycle	36	6	42	36	21	57	79	25	104
Training of primary supervisors	16	2	18	10	2	12	15	0	15

Table 3. Number of teachers who have completed in-service training

Types of teacher training	1968-69	1969-70
Primary teacher training	700 men and women	200 men and women
Secondary teacher training	none	none

Organization of instruction. The curricula are academic and the same time professional in character. Methods used in theoretical courses are lectures usually followed by note-taking. Student-teachers themselves undertake readings, researches or personal documentations of books of their own choice. Method courses are given by professors through discussions and analyses of methods followed in schools and of modern methods; demonstration classes by the best available teachers are also arranged.

Professors must render a maximum weekly service as follows:

	Hours
Professor with Ph. D.	15
Professor with M. A. degree	17
Secondary teacher of the first cycle	18
Teacher in charge of special education (art, physical education)	19
Workshop personnel	40
Non-specialized primary teachers	30

Curriculum. Teacher education curriculum is prepared by heads of the institution in collaboration with teachers responsible for the subjects and approved by the Training Council of the Faculté de pédagogie. It includes academic courses and professional training.

The following subject and time allocation in the daily time-table is aimed at giving student-professors adequate professional training.

Optical subjects	First choice	Second choice	Psychology	Pedagogy	Educational philosophy	Administration and Ethics	Total
French-Khmer	F=9h	K=9h	2h	2h	2h	1h	25h
English-Khmer	A=9h	K=9h	2h	2h	2h	1h	25h
History-geography	H=9h	G=9h	2h	2h	2h	1h	25h
Mathematics-physics	M=9h	P=9h	2h	2h	2h	1h	25h
Natural sciences-chemistry	NS=9h	C=9h	2h	2h	2h	1h	25h

Each optional subject involves five hours of subject content and four hours of methodology or observation in the classes at the Laboratory College. Two-hour sessions in practical work are organized for science subjects. Studies are completed by practice teaching.

Student teaching. Practice teaching in the primary and secondary teacher training institutions is organized as follows:

a) An observation period of two weeks in the lycées in the capital during the first semester;

b) A practice teaching period of 6 weeks in the lycées of the capital under the Directors of practice teaching, chosen from among professors of the faculty or other competent personalities.

Observation of class lessons in the laboratory school attached to the centre is compulsory.

There is one laboratory lycée for secondary student-professors and another for primary student-teachers. These two schools are located in the capital, and the trainees go there regularly for observation or practice teaching as the case may be. At the Centre de Kompong Kantuot, there is one common transportation system for student-teachers who carry out their practice teaching in the different primary schools distributed in various parts of the locality.

In the primary schools, the ratio of student-teachers per professor is 1:35. In the secondary schools, the ratio is 1:25.

In each class, there is a record of grades in which teachers write down the grades obtained by student-teachers for their homework and their lessons. There is also a notebook in which each teacher indicates the topics of each lesson taken and the nature of the work assigned to students as well as the date and the hour when this work must be accomplished. The head of the institution makes certain by regular supervision that the curriculum is followed.

Student teaching includes a variety of activities such as preparation of teaching materials, experimenting with the teaching methods studied in theory classes, participating in field trips and excursions of school children, supervising children before and after classes, helping staff members in the organization of teaching materials and in classroom management, participating in the

construction and provision of equipment for buildings, sports fields, school yards, etc., participating in the maintenance of cleanliness in the co-operating schools and in their beautification, organizing and participating in sports activities in the schools, in ceremonies, social functions, etc., using agricultural work and manual work on construction sites, and participating in village development programmes. Material aids supplied to student-teachers are Guides to Practice Teaching and Lesson Plans.

The Ministry of National Education awards the Diplôme d'instituteur (primary teacher's diploma) to successful candidates. After receiving the diploma, they are appointed by the Minister to teach in primary or secondary institutions in the country. They undergo a period of probation which lasts for one year and is considered as the second year of practice added to the first year of student teaching at the Faculté de pédagogie.

Teacher educators

The number of teacher educators in the last three years is given in Table 4.. These include professors of higher education and those in lower grades.

Table 4. Number of teacher educators

Level of teacher education	1967-68			1968-69			1969-70		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Primary teacher training	41	18	59	58	22	80	-	-	57
Secondary teacher training	19	2	21	25	2	27	-	-	37

Each teacher training institution has a director, assisted by a deputy director, several supervisors, an accountant and a librarian. The director is in full charge of education, administration and finance and supervises all aspects of the economic service and checks the funds of the institution at the end of each month. He is also responsible for the implementation of the curricula. Every month he inspects notebooks and makes known all necessary observations to the teachers. He visits classes and makes suggestions to teachers. He presides at class councils, education councils, discipline councils and administration councils.

The deputy director assists the director in the administration of the institution in general. He looks after the conduct, morals, work and progress of students. He also assists in the supervision of all the economic aspects. The supervisors are subordinate to him.

In-service education

The Ministry of National Education organizes in-service teacher training courses. These courses are given exclusively during the long vacations. Professors are recruited from among primary inspectors, principals of schools and experts in pedagogy and psychology. These staff members handle the training of primary teachers in-service. Courses ordinarily last for one month.

Teacher participants get a travel indemnity of 80 riels daily. Aside from these periodic courses, they make use of seminars, workshops, lectures, as methods of in-service training. Often these in-service training courses aim at training heads of institutions, administrators and subject teachers in practical activities such as general mechanics, wood-work, steelwork, agriculture, and home economics.

Training of primary inspectors is also provided, and admission to the course lasting for one year is by competitive examination. All the primary teachers from grade II can submit their applications.

Research

The Office of Educational Services, the Office of Education, the Psychotechnical Section, the National Committee of Khmerization are agencies engaged in research. The expenses incurred by these agencies are covered by the national budget. Publication of the monthly journal The Khmer Primary Teacher and the Bulletin on the application of diversified curriculum A.B.C. (A - General Section; B - Mathematics Section; C - Applied Sciences Section) and a collection of French books for secondary classes have been the work so far done by these agencies.

There are no training institutions that undertake research. The research programmes in the field of education are specifically taken care of by ad hoc committees composed of national experts and officials of national education.

REPUBLIC OF KOREA

Education system

Present structure and organization. The current system of school education in the Republic of Korea follows a 6-3-3-4 pattern. The six-year primary school may be preceded by a two-year kindergarten. The first three years of the secondary school (grades VII, VIII and IX) form the middle school. The next three years (grades X, XI and XII) form the high schools. There are also civic schools providing a three-year primary education, and higher civic schools providing a further post-primary education to children and youth who are unable to attend the six-year elementary schools and/or the middle schools. A few technical schools offering education at the middle school level in some trades for a period of three years and higher technical schools teaching courses in practical engineering, beauty culture, etc., have been established by private bodies. Higher education institutions consist of two-year junior colleges, two-year teachers' colleges and four-year universities and colleges.

There were 470 kindergartens in Korea in 1968 with 22,327 children between 4 and 6 in attendance. Elementary education became compulsory in 1948 for the 6 to 11 age-group and by 1968 there were 6,572 elementary schools (national public and private) with 5,548,577 students and 92,530 teachers; 1,144 middle schools with 1,013,494 students and 24,476 teachers and 840 schools with 48,494 students and 16,688 teachers. There were, in addition, vocational high schools providing agricultural, technical, commercial, fishery and marine and home economics studies as specializations.

Text based on response to the Institute's questionnaire through the courtesy of the Central Education Research Institute (Republic of Korea) supplemented by information from other documents.

The junior colleges are usually an extension of the vocational education courses taught in high schools for imparting semi-professional knowledge and skills for selected occupations.

In 1968 there were a total of 222 higher educational institutions with 172,410 students and 8,898 professors.

Teacher education

Eighteen normal schools for the training of elementary school teachers were established before 1951. In the following decade, two types of teacher training institutions were evolved and are now the standard pattern: (1) two-year teachers' colleges for elementary and middle school teachers and (2) four-year teachers' colleges (College of Education) for middle and high school teachers.

Management, control and financing. Teacher training is supervised by the Teacher Training Section of the Bureau of Higher Education in the Ministry of Education. Institutions for primary teacher training could be totally subsidized by the Government, but most of the institutions raise 15 to 25% of their budgets from student fees. The same is the case with the public institutions for secondary teacher training. Private colleges, however, collect tuition fees and fees for expansion of facilities, and the rest comes from the foundation subsidy. Proposals are under discussion for fully subsidizing colleges in order to reduce the burden of students' fees.

Types, levels and duration. There are 16 junior teachers' colleges or teacher training institutions for the primary level. For preparing general secondary school teachers there are 13 teachers' colleges, three of which are national and the others private, and 100 university departments. The duration of primary teacher training is generally two years (with a four-year programme in a few cases) after 12 years of schooling (6 years primary and 6 years secondary) and it leads to a primary teacher's certificate. Secondary teacher training is a four-year course after 12 years of schooling, and leads to a B.A. or B.S. degree and the secondary teacher's certificate. There are also other training systems (emergency programme for recruiting primary and secondary teachers, usually once a year). As the graduates of the junior teachers' colleges meet

only 50% of the annual demand for teachers, temporary teacher training institutes offering a four-month course to the graduates of vocational high schools, junior technical colleges and other higher educational institutions have been attached to all junior teachers' colleges. This short-term training course enables these graduates to be appointed as semi-qualified elementary school teachers. Similar institutes for training teachers have also been established since 1968 in colleges of education and graduate schools of education to offer to unqualified teachers the full course of the junior teachers' college or of the College of Education through summer and winter sessions and night sessions.

Of the total number of 16 institutions for primary teacher training, two are in each of the main cities, two in each of five provinces, and one in each of the remaining four provinces.

In the case of the institutions for secondary teacher training, more than half of the teachers' colleges are distributed among one big city and four provinces, while many of the colleges and universities which offer professional courses are established in each of the big cities and provinces.

The distribution of institutions is adequate by province as well as by county. Every big city or province has one or two of the institutions for primary and secondary teacher training in it, and all the districts, except for small areas with below 50,000 population, have one or two also.

Admission and enrolment. Since 1969 entrance to institutions for primary and secondary teacher training has been gained by passing a qualifying State examination administered by the Ministry of Education upon graduation from high schools. College and university entrance and grades in the secondary school examination are not counted for this purpose. However each institution may give its own admission tests. Skill tests are held in the departments of music and fine arts. For admission to institutions for secondary teacher training, the tests are the same as in the institutions for primary teacher training except the skill test in physical education. There is no age limit for admission.

The number of students enrolled and the graduates in the years 1967, 1968 and 1969 are indicated in Tables 1 and 2.

Table 1. Number of students enrolled in 1967, 1968 and 1969

Type of teacher training institutions	Number of students enrolled								
	1967			1968			1969		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	5 500	3 318	8 818	5 080	4 522	9 602	4 820	5 672	10 492
Secondary teacher training	3 037	4 888	7 925	3 684	5 312	8 996	3 663	5 638	9 301

Table 2. Number of students graduated in 1967, 1968 and 1969

Type of teacher training institutions	Number of students graduated								
	1967			1968			1969		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	2 519	1 277	3 806	2 166	1 985	4 151	2 640	2 500	5 140
Secondary teacher training	470	911	1 381	659	1 146	1 805	711	1 213	1 924

Organization of instruction. The staff members except the Chiefs of Academic and Student Affairs, Directors of Library, Museum, and of the in-service education institutions, are full-time in both types of institutions. The full lecture load is 10 hours. Faculty members with administrative duties have six hours of lecture work a week, and those with supervisory responsibilities only four hours.

In 1969, of the institutions for primary teacher training, three had an enrolment of less than 300, one between 300 and 500, and 12 between 500 and 1,000; and of all the institutions for secondary teacher training, one had an enrolment of less than 300, six between 501 and 1,000, and six between 1,001 and 2,000. (This excludes colleges and universities which run only professional education courses).

Only the institutions for secondary teacher training have academic departmental organizations. The departments are of Education, Korean Language Education, Foreign Languages Education (English, German, and French), Social Studies Education (social studies, history, and geography), Mathematics Education, Science Education (physics, chemistry, biology and earth), Home Economics Education and Physical Education. Some of the universities have a slightly different departmental organization, the main ones being the Department of Education, Educational Psychology, Audio-Visual Education, Nursing Education, etc.

For primary teacher education, the class size calculated on the basis of the total number of classes is 32 in institutions with less than 300 enrolment, 38 in those with 300-500 enrolment, 38 in those with 501-1,000 enrolment, and 41 in those with 1,001-2,000 enrolment. For secondary teacher training, the class size is 35 in institutions for the first category, none in the second, 38 in the third, and 40 in the fourth. (There are no institutions for secondary teacher training in the second category, i.e. with 300-500 enrolment). Class size has been determined by the Ministry of Education, the basis being the supply and demand of teachers, the economic condition of the college, and the facilities and number of staff members of the college concerned. The numbers are really in excess of the legal provisions in both types of institution, since 40 is the prescribed size for classes in primary and 35 for classes in secondary teacher training. The teacher-student ratio is one teacher for 12 students in the institutions for primary teacher training with an enrolment of less than 300; 1:16 in those with 300-500; 1:17 in those with 500-1,000; and, 1:18 in those with 1,000-2,000. In the institutions for secondary teacher training, it is 1:28 in the first category, 1:44 in the third, and 1:27 in the last, respectively (calculated on the basis of the total number of students divided by the total number of staff members).

Curriculum. The curriculum in primary teacher education includes: (a) Professional education - Foundations of education (4 hours), child development and guidance (5 hours),

primary Korean language education (2 hours), primary mathematics education (2 hours), primary social studies (2 hours), primary science education (3 hours), primary physical education (4 hours), primary music education (7 hours), primary fine arts education (6 hours), vocational education (7 hours), audio-visual education (2 hours), school library management (2 hours), educational research methods (2 hours), research in subject matter areas (6 hours), education for character building, overcoming communism and life adjustment, and practice teaching (8 hours); (b) General education - Korean language (6 hours), history of civilization (3 hours), philosophy of democracy (2 hours), problems in Korean society (5 hours), natural sciences (6 hours), mathematics (4 hours), English (2 hours), physical education (4 hours), and military science education.

In the general secondary teacher training programme, the courses required are: (a) Professional education - principles of education (3 hours), educational psychology (3 hours), history of education (3 hours), teaching methods (3 hours), curriculum (3 hours), guidance (2 hours), educational sociology (3 hours), and student teaching (5 hours); (b) Electives - one course (2 hours) from among theory of secondary education; (c) General education - Korean language (4-6 hours), English (6-8 hours), history of civilization (3 hours), social science (3 hours), mathematics (3 hours), and physical education (8 hours). At present the Education Law prescribes what has to be taught for general and professional education in the institutions for primary and secondary teacher training. This law also mentions that addition and abolition of courses are possible only with permission from the Ministry of Education. The sequence of professional and general education courses is described in Table 3.

Table 3. Sequence of professional and general education courses*

	Primary teacher training		Secondary teacher training	
Grade	Professional	General	Professional	General
I	1) Fundamentals of education	1) Korean language	1) Principles of education	1) Korean language
	2) Child development	2) History of civilization		2) English
	3) Practice teaching	3) Problems in Korean society		3) Second foreign language
	4) Primary physical education	4) Philosophy of democracy		4) Introduction to philosophy
	5) Primary music education	5) Natural sciences		5) History of civilization
	6) Primary fine arts and education	6) Mathematics		6) Introduction to natural sciences
	7) Primary vocational education	7) English		7) Physical education
		8) Physical education		8) Mathematics and social science
II	1) Curriculum		1) History of education	1) English
	2) Educational administration		2) Educational psychology	2) Second foreign language
	3) Practice teaching			3) Physical education

* Some colleges vary from this typical arrangement used in most of the secondary teacher training institutions. Students of secondary teacher training institutions are required to select more than one subject among humanities, social sciences, and natural sciences respectively during the 2nd to 3rd year.

Table 3. Sequence of professional and general education courses (cont'd)

	Primary teacher training		Secondary teacher training	
Grade	Professional	General	Professional	General
II	4) Primary Korean language education 5) Primary mathematics education 6) Primary social studies education 7) Primary scientific education 8) Primary physical education 9) Primary music education 10) Primary fine arts education 11) Primary vocational course			
III			1) Curriculum 2) Educational sociology 3) Educational evaluation 4) Teaching methods	1) Physical education
IV			1) School administration 2) Guidance 3) Practice teaching	2) Physical education

Student teaching. Of the 16 institutions for primary teacher training, 14 have attached laboratory schools. All the 13 colleges for secondary training have their respective attached schools. Some teacher training institutions which do not have such schools are colleges which were inaugurated only a few years ago, and they will establish practice schools of their own in one or two years' time. A student-teacher in an institution for primary teacher training spends six weeks in the attached practice school and another six weeks in another co-operating school. A student-teacher in an institution for secondary teacher training spends only six weeks in the attached practice school. The student teaching programme in the primary teacher training institution covers three parts: observation of classwork, participation in various activities concerning teaching and learning activities, and practice teaching. The student teaching programme in general secondary teacher training is usually the same as the above.

Evaluation. Evaluation is internal in both junior teachers' college and secondary teachers' college for secondary level training. Each professor and instructor has full freedom in choosing the type of examinations and in giving grades. Usually about 90% pass, i.e. get D or above; the total average must be C or above for graduation.

Practice teaching is evaluated by the teachers of the practising schools. College supervisors supervise but do not evaluate; however, they oversee the grades given and sometimes moderate them.

Teacher educators

Qualifications. Qualifications of teacher educators in the institutions for primary and secondary teacher training are shown in Table 4.

These are legal standards of faculty qualifications which are now considered satisfactory. Most colleges have their own independent "Qualification Regulations for the Staff" or "Regulations for the Appointment of Professors", which demand higher qualification or more specific and detailed ones than the legal standards.

Table 4. Faculty qualification

Level of education / Length of experience / Rank	Graduate or equivalent			Junior college graduate or equivalent		
	Research	Education	Total	Research	Education	Total
Primary teacher training						
Full professor	3	4	7	4	6	10
Associate professor	2	2	4	3	4	7
Assistant professor	2	1	3	2	3	5
Full-time instructor	2	0	2	2	1	3
Secondary teacher training						
Full professor	4	6	10	5	8	13
Associate professor	3	4	7	4	6	10
Assistant professor	2	2	4	3	4	7
Full-time instructor	2	1	3	2	3	5

Recruitment. Recruitment of new members of the faculty in the institution for primary teacher training follows certain appointment procedures which can be classified into two stages: proposal and appointment. The proposal stage includes selection and recommendation of a suitable person by the dean through the chairman of a department or the department head, after a formal or informal discussion among department professors; and approval of the proposal or revision of it by the college personnel affairs committee and the appointment of the candidate by the president of the institution who is the official proposing authority. The Minister of Education then gives approval for the appointment, after which the last process in exercising the appointing right - the issuance of a letter of appointment - takes place. This right is retained by the President of the Republic of Korea.

In the recruitment of faculty for secondary teacher training, the same procedures are followed in national/public institutions; but in private institutions the procedures are a little

different. There are practically no constituted authorities which retain power to agree or disagree with a proposal, except an occasional "accomplishment evaluation committee" or "personnel committee." The Board of Trustees is in practice the approving authority for the appointment. Generally the appointing right is retained by the chairman of the Board.

In-service education

There are two types of in-service education in the institutions for primary teacher training. First is the orientation course for those who are appointed as vice-principals or regular teachers of primary schools. The second is the refresher training course aimed at increasing professional competence of regular and assistant teachers of primary schools. Each course is given twice a year for periods of six weeks. The institutions for secondary teacher training have two main programmes for both educational administrators' group and the teachers' group in secondary schools, each with two sub-courses: orientation training and refresher course. Orientation courses are given for the newly-appointed superintendents of schools, school supervisors or secondary school principals for six months, and those who have been acting vice-principals or regular teachers of secondary schools for 12 weeks. On the other hand, the refresher training are provided for those who are currently serving as superintendents, supervisors or secondary school principals through six-month courses and for those who have been regular or assistant teachers in secondary school through 12-week courses in order to improve their professional competence. Each course is held twice a year. In-service education provides teachers with opportunities for promotion.

In 1963 the Ministry of Education established In-service Education Institutes attached to the national colleges of education and the junior teachers' colleges for conducting summer and winter programmes for elementary and secondary school teachers to upgrade their qualifications. The Boards of Education in the Province and Country Education Offices also conduct in-service courses. The College of Education, Seoul University, operates the In-Service Institute for Educational Administrators. All these lead to higher certificates. To help unqualified teachers to obtain the required qualification, the Ministry

of Education decided to establish institutes for training teachers in all junior teachers' colleges. Colleges of Education and graduate schools of education in 1968. These will handle the full courses of the institutions through winter and summer sessions and night classes.

Research

Roughly speaking, one-half of the professors in teacher training institutions have undertaken research during the last year. Research in institutions for primary teacher training is undertaken co-operatively and/or individually by instructors and professors. Research departments and/or a visiting research specialist also conduct studies. In the institutions for secondary teacher training, studies have been made individually and/or co-operatively by instructors and professors. Co-operative studies with other institutions are also conducted. However, the lack of research facilities and materials, research funds and time, plus the overload of teachers, impede research activities in the institutions for primary teacher training, though a researcher is provided with clerical help, and the institution undertakes the publication of the study.

Promotion of research in institutions for secondary teacher training has been fostered in the following ways: (1) by giving the researcher release time (in national colleges and universities only), extra compensation and sabbatical leave; (2) by providing the researcher with clerical help; and (3) by the institution undertaking the publication of the study. The research projects undertaken by professors during the last few years have been supported through different financial sources. The majority of the projects, roughly 60%, have been financed individually by professors themselves. In 1967, while the financial support from the colleges and universities accounted for about 20% of the projects, government support accounted for about 8%, that from business organizations about 5%, and foreign aid about 4%.

LAOS

Education system

Present structure and organization. The present structure of the school system consists of six years of primary education and seven years of secondary education. Primary education is given in Ecole primaire in grades I to VI. It is divided into two cycles of three years each. The medium of instruction is Lao in the first cycle and Lao and French in the second. Complete primary education of 6 years is generally available in the towns and townships, but is not easily accessible to village children. Primary education culminates in the award of the primary school certificate. Secondary education includes general education given by public lycées and collèges and by private schools and institutions for technical and vocational education, teacher training, and intermediate religious education. The first cycle of secondary education is 4 years starting with classe de 6ème and ending with classe de 3ème. Admission to grade VI at the lycée is by an entrance examination. Classe de 6ème has two divisions: a and b. 6b provides intensive training in French language as all instruction in the secondary grades is in French. But in lycées and collèges and Polyvalent Fa Ngum (Comprehensive High Schools) all instruction is in Lao. At the end of the first cycle course, pupils can sit for the DEPCEN or BEPC (first cycle school certificate or the Lao Education first cycle certificate). The second cycle of secondary education is 3 years starting with classe de 2e; the 3 classes are classe de 2e, classe de 1ère and classe terminale.

On completion of classe de 1ère the student takes an examination and moves to the classe terminale. This has three sections: philosophy, mathematics, experimental sciences, and economic and political sciences. The baccalauréat examination is taken at the end of the classe terminale.

Text based on response to the Institute's Questionnaire through the courtesy of the Ministry of Education (Laos) supplemented by information from other documents.

A secondary school which has only the first four classes is called a collège; a school which has two cycles (first cycle of four years and second cycle of two or three years) is known as a lycée.

In 1971 there were four lycées (Vientiane, Luang Prabang, Pakse and Savannaket), 14 collèges (Khammouane, Saravane, Samthong, Vangvieng, Paksane, Kengkik, Kong, Sayaboury, Champassak, Attopeu, Bankeun, Houei-Sai, Khongsedone and Paklay) and 4 comprehensive high schools (Fa Ngum Vientiane, Fa Ngum Phonehong, Fa Ngum Savannakhet, Fa Ngum Luang Prabang). Due to lack of personnel, only the lycée Vientiane has the classe terminale (7 years of study). The Ministry of National Education has projected 6 Fa Ngum (comprehensive high schools).

The first year of study in the Fa Ngum (comprehensive high school) is a year of orientation in multiple fields of study and work, using Lao as a medium of instruction, and the foreign languages of English and French. At the end of the first year and continuing for the remaining 6 years, the students choose to study one of the following fields as a major subject: academic, agriculture, commerce, home economics and industrial arts.

With regard to technical education, the Vientiane and Savannakhet technical schools offer polyvalent training (for electricians, masons and carpenters) of three years, plus a one-year apprenticeship training, and also short two-year courses plus one year's apprenticeship for primary school certificate holders to meet the present requirements of skilled workers. The Training Centre for Technical Instructors, set up in 1962 as a United Nations Special Fund project for training instructors for secondary technical schools has also been taken over by the Vientiane Technical School since 1966. A School of Agriculture, a School of Fine Arts (drawing, art, handicrafts) and Conservatory (music and dance), and Rural Trade Schools, designed to give young people a post-primary vocational training in line with the potentialities and needs of the region, are also functioning. There are also teacher training schools.

In Laos there are colleges which provide higher education for 4 to 7 years depending on the subject and the degree. For

Licentiate degree (first degree equivalent to B. A.) the course lasts for four years. There is, however, no university. Those desiring university education usually go to France after taking the baccalauréat.

Tertiary education is an intermediate stage between secondary and higher education accepting students at the BEPC level, i.e. after grade IV of secondary education. The Education Ministry's policy was to raise the level progressively in order that, by 1970, it will recruit bacheliers only. Tertiary education is provided by the School of Medicine, which at present trains assistant doctors; the Royal Institute of Law and Administration, which provides an introduction to political science, economics and law, as well as further training for officials already in service; the Secondary Teachers Section of the Vientiane Teachers' College which trains teachers for the first six grades of lycées and collèges; and the Institute of Buddhist Studies. The study courses range from three to four years, after which most of the students are sent to universities abroad, particularly to France.

For adult education, between 1958 and 1962, the Basic Education Centre in Vientiane supplied 130 basic educators who were assigned to the villages. Apart from the Ministry of Education, various organizations (Rural Development, Agricultural Extension, Operation Brotherhood, etc.) participate in giving basic education in the villages, while the Directorate for Sports and Youth also runs a programme for out-of-school youth.

Teacher education

In 1927, one-year courses in education were given in laboratory schools to student-teachers who were being trained for teaching in primary schools. In 1942, a two-year teacher training course replaced the courses in these laboratory schools. The objective of this course was to provide teacher training to the acting assistant teachers holding the primary school certificate. In 1949, this teacher training course was replaced by a Normal School and the duration of studies was increased to four years.

On 1 October 1960, the Normal School was transferred to the Sisavangvong University. It was then called the National

Centre of Education (Centre Nationale d'Education), and in 1963, it became a Teachers' College (Ecole Supérieure de Pédagogie).

The other teacher training establishments include:

1) Teachers' College, Vientiane, which provides a four-year course for teachers in the Xan tho category (teachers for the second cycle of primary education). This was developed as the Ecole Supérieure de Pédagogie in 1963-64.

2) Luang Prabang and Pakse Training Centres were started around 1965 to provide one-year courses following the primary school certificate for teachers in the Xan tri category (teachers for the first cycle). They both provide four-year courses in addition to the one-year course.

Management, control and financing. The Director-General of Education directly controls the general administration of the Ministry and its technical services (textbooks, audio-visual aids), and also co-ordinates and supervises the 7 directorates: Primary and Adult Education, Secondary Education (lycées and collèges) Technical and Professional Education, Higher Education, Teacher Training, Library Education, and Fine Arts Education. The Director of Teacher Training and Educational Research is in charge of teacher education.

Primary education is directed and controlled in each province by a provincial inspector, assisted in the larger provinces by one or more inspectors. There is one inspector for every 180 primary teachers.

Secondary education is directly administered by the Ministry. The teaching staff is largely French and is inspected by a French inspector, who is also a Ministry Adviser, and by General Inspectors sent each year from France.

Types, levels and duration. In 1970-71 there were the following institutions for teacher training:

1) Four institutions for primary teacher training of four years' duration: Ecole normale de Vientiane, Ecole normale de Luang-Prabang, Ecole normale de Pakse, and Ecole normale de Savannakhet;

2) Four teacher training centres for the accelerated

training of primary teachers offering a two-year programme: Centre Spécial de Formation Accélérée de Vangvieng, Centre Spécial de Formation Accélérée de Ban Keun, Centre Spécial de Formation Accélérée de Samthong, and Centre Spécial de Formation Accélérée de Kene Thao;

3) Ecole Supérieure de Pédagogie in Vientiane for secondary teacher training. The course is made up of (i) the first three years of training to prepare teachers for the first two years of the first cycle of secondary schools, and (ii) the next two years plus one year of internship (usually in France) for teaching the last two years of the first cycle of secondary schools.

For the second cycle of secondary education which is of three years' duration, the teachers are mostly French and only a few are Laotian. These teachers are trained in France. There is a proposal to start training teachers for the second cycle of secondary education in the Ecole Supérieure de Pédagogie from 1971-72. This will be a two-year training and one-year internship for those who have completed the training for teaching the last two years of the first cycle of secondary education. [1]

The teacher training institutions for accelerated training serve primarily the rural areas. The teacher training course for primary teacher education which is of four years' duration lead to B.A.E.P. (Brevet d'aptitude d'enseignement primaire). The training programme for secondary teacher education with 7 to 9 years duration lead to a B.A.E.S. (Brevet d'aptitude d'enseignement secondaire).

Admission and enrolment. The minimum qualification for admission to primary teacher training courses is 6 years of schooling.

The written tests used in the battery of selection tests are: a scholastic achievement test on Laotian language, French and mathematics; and a general knowledge test on history, geography, hygiene, agriculture and current events. These tests are prepared by the Director of Personnel Training, the

1. This was started in 1971.

Directors of the Normal Schools, and the Director of Studies. They are administered by the professors of the Ecole Supérieure de Pédagogie and of the normal schools, in the normal schools, and are scored by the teacher educators in the normal schools who are members of the Examination Council. In addition to these requirements, physical and medical examinations are conducted 15 days before submitting the application for admission.

On the whole, the selection is based on the grades obtained at the entrance examination.

The number of students enrolled in 1966-67, 1967-68 and 1968-69 and the number who graduated in 1967-68 and 1968-69 are given in Tables 1 and 2. It is clear from these tables that the supply of trained teachers is too low for meeting the country's needs.

Table 1. Number of students enrolled in 1966-67, 1967-68 and 1968-69

Type of teacher training institutions	Number of students enrolled								
	1966-67			1967-68			1968-69		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	1 261	531	1 792	1 262	575	1 837	1 472	567	2 039
Secondary teacher training	120	26	146	144	40	184	154	44	198

Table 2. Number of students graduated in 1966-67 and 1968-69

Type of teacher training institutions	Number of students graduated					
	1966-67			1967-68		
	Male	Female	Total	Male	Female	Total
Primary teacher training	316	184	500	355	157	512
Secondary teacher training	22	11	33	29	25	54

Note: Institutions for primary and secondary teacher training are distinctly separated in this organization.

Student aid. The teacher training institutions do not require any tuition fees from the teacher trainees. 90 % of the students in the institutions for primary and secondary teacher training enjoy stipends or internship scholarships. Students are recruited as teachers and then sent for training.

Facilities. The enrolment in the institutions has grown considerably in recent years mainly because of the growing need for teachers, but the facilities have not increased.

Organization of instruction. The average enrolment of a class is 34 students. Teachers teach 18 hours if they are full-time, even if they have administrative or supervisory responsibilities in addition. There is no organization in academic departments except in the Ecole Supérieure de Pédagogie.

Curriculum. Courses on academic and professional training in the programmes of the "Ecoles normales" (primary teacher training schools) are the following:

a) General education: Languages (Lao, French, English); social studies (history and geography, ethics and civics); mathematics, and science.

b) Professional training (theory): pedagogy, history and geography, French, mathematics, science, laboratory work, drawing and writing, community development.

c) Professional training (practice): student teaching.

Student teaching. The Ecole Supérieure de Pédagogie has laboratory schools. The student-teachers practise in the laboratory school for one to three months then go to the co-operating school for one to three months. There is no student teaching for secondary school teacher trainees. When the student-teachers in primary teacher training teach, the lessons prepared by them are reviewed and corrected by the directors of teacher training before they are used.

Evaluation. In content and professional subjects written examinations are given by the institutions concerned, but the final examination is closely supervised by the Ministry of Education. In student teaching classes are normally evaluated by the teachers in the school.

Teacher educators

Qualifications. The minimum qualification for teacher educators in the institutions for primary teacher training is completion of secondary school studies and some experience of teaching in primary schools. For teaching in institutions for secondary teacher training one should have completed higher studies and gained some experience in secondary education. The need for higher qualifications is felt, but they are not prescribed as there is lack of qualified personnel. Professors have to go abroad to acquire higher qualifications.

Recruitment. Recruitment of foreign teachers is done by the Ministry of Education on the specific recommendations

of the Directors of the Institutes. The co-ordination office of the Ministry of Planning arranges to have applications received from foreigners and processed. Lao teachers who acquire foreign qualifications are promoted to suitable positions.

Staff gradation and duties. Every institution has a director who is assisted by an academic director and a student teaching director. To assist in administrative affairs there is a separate officer. The teaching staff members alone do most of the teaching work.

In-service education

In-service training is organized in co-operation with the Office of Primary Education and takes place in the teacher training colleges. Training courses range from one to two months during the summer vacation both for primary and secondary teachers. These are taken into account when promotion is considered, but no other incentives are given.

MALAYSIA

Education system

Present structure and organization. Elementary education in Malaysia is of six years' duration and secondary education is five years, divided into two phases of three and two years each. This is followed by two more years of post-secondary education, provided in colleges beyond grade XI (or Form V). Completion of grade XIII (Upper VI form) qualifies for entrance to a university. This structure is in process of change, with elementary education being extended to nine years of unified and non-selective schooling.

State elementary education is free of charge. Schools are divided into Malay, English, Chinese and Tamil according to the language of instruction. A child who finishes elementary education at the age of 12 has access to three years of comprehensive education, as promotion to each grade is automatic at the elementary and lower secondary levels. This ensures nine years of formal education to every child. The lower secondary school provides a general and pre-vocational education. Only those who pass an examination at the end of the 9th year can continue their education for the next two years in one of the three streams - the academic, the technical or the vocational. The School Certificate examination is held at the end of the five years of secondary education. A further two years of education is required for taking the Higher School Certificate. The University of Malaya in Kuala Lumpur and the University of Penang provide university education of the duration of three or more years. A third, the National University, has recently started functioning at the Malayan Teacher Training College in Pantai Valley, Kuala Lumpur.

Text based on response to the Institute's questionnaire through the courtesy of Ministry of Education (Malaysia) supplemented by information from other documents.

Teacher education

Prior to 1956, full-time training for teachers of primary Malay schools was available at the Sultan Idris Training College in Tanjong Malim, Perak, and the Malay Women's Training College, Malacca. In addition, teachers for the various media primary and secondary schools were trained by a system of week-end training at Normal Training Classes or Teachers Preparatory Classes. A small number of teachers for the higher classes in English-medium secondary schools was trained at the Raffles College, Singapore, which was later incorporated into the University of Malaya in 1949. Some teachers were trained at two teacher training colleges in the United Kingdom.

With independence in 1957, the policy of the Ministry of Education, as enunciated in the Report of the Education Committee of 1956 (or the Razak Report) was to try to co-ordinate as far as possible the different training courses in order to produce teachers with comparable qualifications through a common pattern of teacher training for services in all government assisted schools, irrespective of the media of education.

The system of training during the period 1956-1970 showed a gradual transition towards this objective. The "normal class" system was ended, and full-time teacher training colleges and centres came into existence. In the institutions for primary teacher training, students were trained to teach as general purpose teachers in one of the four language media, namely, Malay, English, Chinese or Tamil. Students in the Malay medium were required to pass in English as a second language, while students in the other media were required to pass in Malay. From 1970 onwards, all students in the institutions for primary teacher training are instructed in the Malay medium, with English as a compulsory second language.

Institutions for training teachers for teaching grades VII, VIII and IX were at first organized as general purpose colleges, the policy being to provide all the subjects in the secondary school curriculum as options during training. Since 1964, institutions for secondary training have been organized on the basis of specific fields of study. Thus, while one college may specialize in training teachers in mathematics and science, another

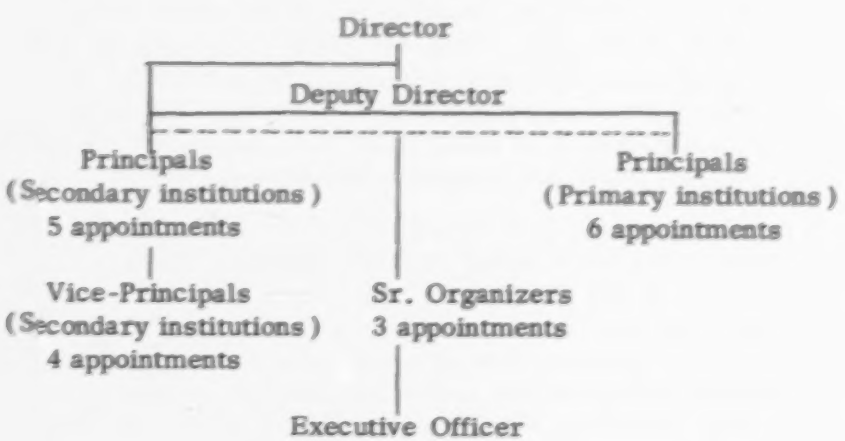
does so in Malay language and arts subjects, and a third in technical and vocational subjects, and yet another in agricultural science and home economics.

Management, control and financing. The Teacher Training Division of the Ministry of Education is in charge of teacher training. The principal professional officers in charge of education in the Ministry are (1) Director-General of Education, (2) Deputy Director-General, (3) Director of Higher Education, (4) Director of Teacher Training, (5) Director of Schools, (6) Chief Inspector of Schools, (7) Director of Technical and Vocational Education, and (8) Director of Examinations.

For ensuring continued effort at maintaining and improving the quality of education, involving increased research, revision of curricula and teaching techniques, an Educational Planning and Research Division, a Higher Education Planning Committee, and an Advisory Committee on the Teaching of the Basic Sciences have been established at the Ministry of Education.

The structure of authority in the Teacher Training Division is shown in Figure 1. The posts of director, deputy director, principals of teacher training institutions and vice-principals are promotion appointments from the ranks of senior education officers.

Figure 1. Structure of authority



Survey of teacher education

Staff officers in the Teacher Training Division who at present consist of two education officers and one senior lecturer work with the deputy director and are responsible for the following professional job areas: (a) Pre-service training and syllabuses; (b) In-service training and examinations: (c) Recruitment. Non-professional job areas are co-ordinated by an Executive Officer, who has direct authority over the clerical and common-user staff. In general, the Teacher Training Division is the main co-ordinating body for teacher training, and is responsible for the transmission of policy directives and the smooth running of the various institutions.

The principals of the institutions for primary and secondary teacher training are generally given a free hand in the running of their institutions, although they must conform to Ministry directives with regard to staffing, financial procedure, curriculum and examinations.

There are no private teacher training institutions.[1] All training institutions are organized by the State and are fully supported by the Ministry by grants which cover the payment of staff, provision of facilities and equipment and maintenance of buildings and grounds. Special projects are sometimes financed through foreign grants, or funds raised by the institutions themselves. No fees are paid by the students.

Types, levels and duration. Since 1968, the pressing demand for teachers in both primary and secondary schools has eased in West Malaysia. This has made it possible to close some institutions and utilize them for other purposes. At present, there are 6 colleges for primary teacher training and 5 for secondary teacher training under the government. Teachers for grades X to XIII are trained in the universities.

The types and distribution of institutions for primary and secondary teacher training in West Malaysia are shwon in Table 1. Although the various institutions are mainly situated in towns, students from rural areas are also adequately served

1. However there is one exception; the St. Joseph's College in Penang trains a very small number of missionary teachers (about five at each intake) to staff the La-Sallean schools.

through the provision of residential colleges. Institutions for primary and secondary teacher training provide two-year full-time courses, with the exception of the Technical Teacher Training College which provides a three-year course.

Table 1. Types and distribution of institutions for primary and secondary teacher training in West Malaysia

Type and Name	Residential / Non-residential	Main language / Subject areas
Primary Teacher Training		
(1) Day Training College, Penang	Non-residential	Malay / English ; Chinese .
(2) Sultan Idris Training College	Residential	Malay
(3) Day Training College Kuala Lumpur	Non-residential	Malay / English ; Chinese
(4) Malay Women's Training College	Residential	Malay
(5) Day Training Centre, Johor Bahru	Non-residential	Malay / English
(6) Kota Bahru Teachers' College	Residential	Malay
Secondary Teacher Training		
(1) Malayan Teachers' College, Penang	Residential	Mathematics and science
(2) Specialist Teacher Training Institute	Residential	Languages and arts commercial subjects, art and crafts, home science, physical and health education, teaching of the blind and deaf.
(3) Technical Teacher Training College	Residential	Technical subjects industrial arts
(4) Temenggong Ibrahim Training College	Residential	Mathematics and science, Agricultural science, home science.
(5) Language Institute	Residential	Malay ; English as a second language

The duration of the courses and certificates awarded are shown below:

Type	Duration	Certificate
Primary teacher training	2 years	Primary Teachers Certificate
Secondary teacher training	2 years	Secondary Teachers Certificate
Trade teacher (secondary) training	3 years	Secondary Teachers Certificate

Institutions for primary and secondary teacher training institutions in East Malaysia (Sabah and Sarawak) with all details regarding medium of instruction, entrance qualifications, duration of training and annual intake/output for two consecutive years ending 1968 are shown in Table 2.

Table 2. Teacher education in East Malaysia

Name of institutions	Medium	Entrance qualifications	Level	Output 1967	Output 1968	Annual intake	Duration
A. Sabah							
(1) Gaya College, Kota Kinabalu	English	(a) Sabah Junior Cert.	Primary	75	64		2 years
		(b) Cambridge Overseas Cert.	Lower secondary	19	27		2 years
(2) Kent College, Kota Kinabalu	(i) Malay	Primary VI	Primary	49	60		3 years
	(ii) Chinese	Sabah Junior (Chinese) Cert.	Primary	30	30		2 years
(3) Emergency Training Centre for teachers in Native Voluntary Schools, Kota Kinabalu (In-service)	-	5 years' teaching experience	Primary	50	50		6 months
B. Sarawak							
(1) Batu Lintang Teachers' College, Kuching	English	(a) Sarawak Junior Sec. Sch. Cert.	Primary			90	2 years
		(b) School Cert.	Secondary			60	2 years
(2) Rajang Teacher Training College, Binatang	English	Sarawak Junior Sec. Sch. Cert.	Primary			150	2 years
(3) Sarawak Teachers' College, Sibu (Regarding courses for untrained teachers)	English/ Chinese	5 years teaching experience	Primary			-	1 year

Upper secondary level teachers for both West and East Malaysia are trained in the universities in West Malaysia or universities overseas. The Faculty of Education of the University of Malaya in Kuala Lumpur offers a certificate course of one year's duration for Diploma holders in agriculture or technology and a diploma course of one year's duration for graduates of the University of Malaya and other recognized universities. A Bachelor's Degree in Education course, which was earlier offered, has since been discontinued. The Faculty of Education has also an M.Ed. course of two years' duration for those with a Diploma in Education or the B.Ed. Degree. A Ph. D. Programme of three years' duration is also provided. The School of Sciences and the Centre for Educational Studies of the University of Penang jointly offer a four-year B.Sc. course with Education for which only students having a Higher School Certificate qualification with science subjects are admitted.

The teacher training programme is at present being consolidated and streamlined, with better teaching and environmental facilities being planned for the existing colleges for primary and secondary teacher training. Over the next three years a significant portion of the effort is proposed to be devoted to in-service training in the Malay language to assist serving teachers in primary and secondary schools to teach in the Malay medium in accordance with the national policy of working towards a single medium of instruction in all schools. This training programme will be provided in the form of a three-month course in teacher training colleges during term time as well as through vacation courses spread over three school vacations. Teachers of science and mathematics are encouraged to proceed to the university to obtain university degrees to meet the shortage of teachers in science and mathematics at the upper secondary level.

Admission and enrolment. Academic qualifications for primary teacher training courses were usually completion of grade IX (Form III) of general secondary school, after having passed the Lower Certificate of Education examination. Increasingly candidates who have completed grade XI (Form V) are becoming available for admission.

The minimum qualification for primary teacher training in West Malaysia is now Division I or II of the Sijil Pelajaran

Malaysia /Malaysia Certificate of Education /School Certificate. Candidates should have passed with credit in Malay language and with credits in two other academic subjects.

Candidates who possess a pass in the national language (Bahasa Malaysia) may also be considered. Such candidates are required to obtain a credit in Malay language during the period of training, if they are selected for training.

Candidates who wish to be considered for the Chinese course in primary teacher training should also possess a credit in Higher Chinese /Chinese Syllabus X.

The minimum prescribed qualification for secondary teacher training in West Malaysia now is Division I or II of the Sijil Pelajaran Malaysia /Malaysia Certificate of Education /School Certificate. Candidates should have passed with credit in Malay language and with credits in two other subjects excluding religious knowledge.

Since 1969 preference is given to candidates with credits in: (a) mathematics and science subjects, and (b) technical subjects.

Table 3 shows the number of students enrolled in teacher training institutions in West Malaysia.

Table 3. Number of students enrolled (West Malaysia)

Type of teacher training institutions	Number of students enrolled								
	1967			1968			1969		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	2 643	2 397	5 080	1 703	1 601	3 304	852	513	1 365
Secondary teacher training	2 915	1 944	4 859	1 742	1 050	2 792	781	481	1 262

The annual enrolment of university graduates for the diploma course in the University of Malaya is about 400 a year, while that for the M.Ed. degree is about 40. For the B.Sc. with Education course at Penang, the annual enrolment is approximately 60 only. The small number of university graduates trained for teaching, and the fact that these courses have been organized only within the last few years, explain the shortage of trained teachers for the higher grades of the secondary school.

Student aid. Candidates admitted to teacher training colleges receive free tuition. Those admitted to residential colleges receive a monthly allowance of M$ 40.00, out of which they pay the college M$ 4.00 a month for use of facilities. Those in non-residential colleges receive a monthly allowance of M$ 150.00. The costs of books and clothing are borne by the students themselves.

Facilities. In general, the campus and buildings of institutions for both primary and secondary teacher training are adequate in terms of the

present enrolment, though new teaching blocks will be required in some institutions for secondary teacher training to meet the expected increase in student intake over the next few years. An additional residential block and workshop has been planned for the Technical Teacher Training College.

The physical facilities in each institution normally comprise the following : auditorium, lecture rooms, tutorial rooms, library, common room, music room, audio-visual room, art room, projection room, special subject rooms, canteen, playing field, badminton and tennis courts. Equipment is generally adequate.

In specialist institutions for secondary teacher training the following special facilities are provided: gymnasium, swimming pool, kitchen and needlework room for home science, industrial arts workshop, and language laboratory.

The student body in each institution organizes itself into a Students' Union, and students' affairs are co-ordinated by a Students' Council.

Organization of instruction. There is a departmental organization in every college. The head of a department is usually a senior lecturer in the subject. All academic staff are full-time, except for isolated cases where permission is obtained by the college concerned to employ teachers in secondary schools as part-time lecturers in specialized subjects. The average teaching load of a full-time staff member is 15 hours a week. Principals of colleges for primary and secondary teacher training arrange their own time-tables based on the general requirements. Syllabuses are prepared by special committees made up of representatives from the various colleges and are submitted for approval to the Ministry of Education. The approved syllabuses are implemented by all colleges. There is provision for periodical review of the syllabuses. Aims and objectives are specified in each syllabus. In West Malaysia, the staff-student ratio in institutions for primary teacher training ranges from 1:10 to 1:15. In all institutions for secondary teacher training it is 1 : 10.

Curriculum.

a) The subjects in curriculum of primary teacher training and the time allocation are as follows:

Subjects	Time allotted per week
Education	8 hours
Languages (Malay, English or Chinese)	12 "
Music	2 "
Art and crafts	2 "
Physical and health education	2 "
Mathematics and science	3 "
	29 hours

In addition, two hours are set aside weekly by each lecturer to conduct tutorials for groups of students.

b) The subjects in the curriculum of secondary teacher training are given below:

Subjects	Time allotted per week
Education	5 hours
Special or main subjects	8 "
General subjects (2 per year)	2 "
Language studies	
Malay/national language	4 "
English	4 "
Physical and health education	3 "
Tutorials of programmed topics	1 "
at Principal's discretion	3 "
	30 hours

Student teaching. Teacher-trainees are required to undertake an average of 10-12 weeks of teaching practice over a two-year course. This is done in government-assisted primary and secondary schools in the vicinity of the college concerned. These schools are selected by negotiations between the College Principals, the Chief Education Officer and the Heads of the schools concerned. Transport is normally provided by the college between the institution and the schools selected. A period of observation of class-teaching precedes actual teaching by the trainees themselves. Each group of trainees is supervised, advised and examined during the period of teaching practice by a college lecturer. There are no special laboratory schools.

Evaluation. In primary teacher training, the first-year examination is conducted by the college itself. Trainees who are exceptionally weak after the first year are retained or have their training terminated on the recommendation of the principal. The second-year examination is conducted by the Ministry of Education, The Ministry appoints subject panels consisting of Chief Examiners, Assistant Chief Examiners and Assistant Examiners from among the staff of the various colleges. Draft question papers are drawn up by the panel for approval by the Ministry.

Evaluation in secondary teacher training is done according to the following procedures:

a) The two-year basic course ends with a final examination called the Secondary Teachers' Certificate Examination. This examination is conducted partly by the colleges themselves with the Faculty of Education, University of Malaya as the External Examiner. The Teacher Training Division acts as the main co-ordinating body.

b) The core subjects such as education, physical and health education and basic language papers are set by the Faculty of Education. The main or special papers are set by the colleges of specialization themselves but moderated by the Faculty of Education.

c) Answer scripts are marked by college lecturers concerned, after which the marks are submitted to the Faculty of Education for moderation. The Examinations Syndicate processes the results and releases them.

d) The examination for students of the two-year special course (for holders of the Higher School Certificate) is conducted in two stages. At the end of the first year, students appear for a final examination in health and physical education, basic language subjects such as Malay and English language and their main subjects. The papers are set by the colleges concerned, moderated by the Faculty of Education and later duplicated by the colleges concerned for their own use. At the end of the second year, these students appear for a second final examination in education which is the same paper as set for the two-year basic course students, and do practical teaching. This course is now discontinued.

e) For both the above examinations, students are normally allowed only one re-examination. They are re-examined in all the papers of a subject or subjects in which they failed at the end of the year following the last final examination. In all other examinations such as the supplementary one-year course or any other special courses, the colleges concerned will prepare and conduct their own examination in conjunction with the Faculty of Education which is the external examining body.

Course marks (i.e. marks awarded by the college supervisors) for teaching practice are also taken into consideration in the final assessment of the trainees. In addition, formal examinations of the teaching practice are conducted firstly by the supervisors concerned and then by the External Examining Board consisting of the College Principal, Heads of Subject Departments and a representative of the Chief Education Officer.

Successful candidates in the final examinations are awarded the Primary Teachers' Certificate or the Secondary Teachers' Certificate. The Certificates are issued by the Ministry of Education only when the trainees have satisfactorily completed one year's teaching after graduation. However, the teacher is entitled to receive the initial salary according to scale from the date of his reporting to school after completion of training.

In addition to his professional qualification, the teacher must obtain a Certificate of Registration as a teacher before he is entitled to teach in any primary or secondary school. The issue of this certificate depends on qualifications obtained, character of the applicant and his citizenship status.

Teacher educators

Tables 4 and 5 present the qualifications required of the staff of the training institutions.

Recruitment. All members of the staff are recruited by the Ministry of Education, and are classified as government servants. The academic staff in the teacher training institutions belong to a separate service within the Ministry of Education, but there is provision for Education Officers to be seconded to teacher training colleges against the posts of senior lecturers or lecturers.

Table 4. Qualifications required of staff of primary teacher training institutions

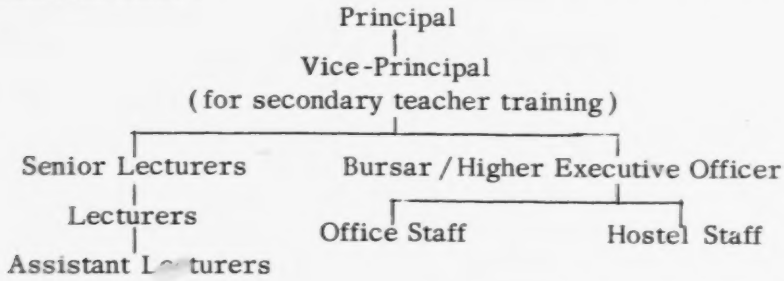
(1) Primary teacher training	(2) Age	(3) Experience	(4) Academic qualifications	(5) Professional qualifications
(i) Assistant Lecturers	Below 40 (Below 50 for applicants with exceptional ability)	3 years' post-qualifying experience	Malaysia Certificate of Education / Oversea Cambridge School Certificate with strong credits in relevant subjects	Normal class trained / College trained
(ii) Lecturers	- do -	5 years' post-qualifying experience	- do -	(i) Normal class trained / College trained (ii) Professional Certificate / Diploma in relevant subject areas
(iii) Senior Lecturers	Below 50	10 years' post-qualifying experience of which a portion must be in a teacher training institution	- do -	- do -

Malaysia

Table 5. Qualifications required of staff of secondary teacher training institutions

(1) Secondary teacher training	(2) Age	(3) Experience	(4) Academic qualifications	(5) Professional qualifications
(i) Assistant	Below 40 (Below 50 for applicants with exceptional ability)	3 years' post-qualifying experience	Malaysia Certificate of Education/ Oversea Cambridge School Certificate with strong credits in relevant subjects	Normal class trained / College trained
(ii) Lecturers	- do -	5 years' post-qualifying experience for applicants without an Honours Degree	(1) Honours Degree from a recognized university. (2) Pass Degree from a recognized university and 5 years' post-qualifying experience in teaching or lecturing (3) Malaysia Certificate of Education/ Oversea Cambridge School Certificate with strong credits in relevant subjects and 5 years' post-qualifying experience	(1) Diploma in Education (2) - do - (3) (i) Normal class trained/ College trained (ii) Professional Certificate/Diploma in relevant subject areas
(iii) Senior Lecturers	Below 50	10 years' post-qualifying experience	- do -	- do -

Staff gradations and duties. Staff organization, whether in institutions for primary or secondary teacher training, is as presented below:



The Principal, who is assisted by a Vice-Principal in the case of institutions for secondary teacher training, carries out his duties through heads of subject departments for academic matters and through the Bursar (or Higher Executive Officer in the case of institutions for primary teacher training) for administrative matters. The head of a subject department is normally a senior lecturer who is assisted by lecturers and assistant lecturers.

In-service education

Besides pre-service training, the Teacher Training Division conducts in-service courses in the various teacher training institutions during vacations. It also acts as the co-ordinating body for courses conducted by other divisions of the Ministry. The courses include:

(1) Courses conducted by the Teacher Training Division

- (a) Vacation courses for Guru Raayat.
- (b) Vacation courses for temporary Tamil school teachers.
- (c) Vacation courses for temporary Chinese school teachers.
- (d) Vacation courses for temporary Chinese school teachers of the national language (Bahasa Malaysia) in non-Malay medium schools.
- (e) In-service courses in Malay language for teachers in English-medium primary schools.

(f) Vacation courses for Islamic religious teachers.
(g) Administrative courses for heads of primary schools.

(2) Courses conducted by the Schools Division

(a) In-service course in integrated science (lower secondary schools).
(b) In-service course in Nuffield Science (upper secondary schools).
(c) In-service course for laboratory attendants/assistants.
(d) In-service course in new mathematics.
(e) In-service course in primary science.
(f) In-service course in primary mathematics.
(g) In-service course in health education.

(3) Courses conducted by the Federal Inspectorate

(a) Primary mathematics.
(b) Primary science.
(c) Art and crafts for primary school teachers.

(4) Courses conducted with UNICEF Funds

(a) Home science.
(b) Educational guidance and counselling.

(5) Courses conducted by the Technical Education Division

(a) Electrical installation.
(b) Sheetmetal and welding.

Teachers attending the above courses are nominated by the Chief Education Officers of the States concerned. No extra remuneration is given to the teachers, except to those in the first group. They are however provided with full board and lodging for the duration of the courses.

Research

No formal research is at present carried out by the academic staff in teacher training institutions. Research is however carried out by the staff in the Faculty of Education, University of Malaya.

MONGOLIA

Education system

Before the 1921 revolution there was only one secular school among the many Lama monasteries. There was barely 1% literacy and women did not enjoy equal social rights with men. In October 1921 the People's Government set up the first primary school for 40 pupils, offering instruction in the mother tongue, arithmetic, nature study, geography and history. In 1924 the first Great National Khural which proclaimed the country as a People's Republic, declared in the Constitution the right of the working people and their children to free and secular education. Following this, along with government supported schools, a number of voluntary schools were organized and supported by the people themselves. As the majority of the people were nomads, boarding facilities were provided for school children, and clothing, food, textbooks and stationery were given free. In 1933 the first unified curriculum was introduced. The Lama schools ceased to exist, and a single unified school system began to operate in 1940. The Constitution of 1952 once again guaranteed the rights of all citizens to education, and this was ensured by the provision of compulsory general primary education, the development of a network of schools and institutions of secondary specialized and higher education, the use of the mother tongue as the medium of instruction and a system of State scholarships to students for secondary and higher education and free vocational training for workers. Universal compulsory education of four years was introduced all over the country between 1953 and 1957, and in 1958 compulsory education of seven years was introduced in towns and the 18 provincial centres. In 1963 a school law was adopted by which the ties between school and life were strengthened; the schools were now to produce educated people

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Text based mainly on Unesco and government documents and other reference material; response to Institute's questionnaire was not available.

capable to integrating physical with mental labour and generating respect for the principles of the socialist society. Secondary education from age 16 to 17 was to be based on the combination of instruction with productive work. New curricula for the 8-year and 11-year schools were introduced in 1964 on the basis of the school law. Since then the 11-year school has been reduced to 10 years.

The rapid expansion of the compulsory school system and literacy campaigns has resulted in universal literacy. One in every six of the population is receiving education in some institution, and practically all children of primary school age are in school. The rapid development of national economy requires an education system capable of coping with its increased tasks and demands, and the public education system has been developed accordingly.

Present structure and organization

1. Pre-school education in crèches for children up to three years and in kindergartens for the 3-8 age-group (both free but optional).

2. Primary education in four-year rural schools or in the first four grades of the 7-year 'pre-reform' school, or the 8-year incomplete secondary school, or the 10 or 11-year complete secondary school, for the 8-12 age-group, culminating in a State examination to enter secondary grades.

3. Incomplete secondary education: grades V to VII in the pre-reform 7 or 10-year schools, or grades V to VIII in the new 10 or 11-year schools. At the end of grade VII of the first type of school or of grade VIII of the new school, pupils have to take another State examination for getting the incomplete secondary school certificate. The new grade VIII combines socially useful productive work and fundamentals of agriculture with general education imparted in the grade VII pre-reform school. Incomplete secondary education can also be obtained in evening schools for workers and adults.

4. Complete secondary education: 8-10/9-11 grades in the 10 or 11-year secondary day schools or in the 10-year general education secondary evening schools for workers and adults or in secondary specialized schools (tekhnikums) - three or four years of study. The curricula and syllabuses vary from one type of school to another; while many give general secondary and polytechnic education, others are specialized schools for every branch of industry, agriculture, health and public education.

5. Higher education. Those who have a complete secondary education or are tekhnikum graduates are eligible for higher education. There are 6 higher education establishments all located in Ulan Bator, the capital city, for training highly qualified specialists for every branch of the national economy and for cultural life, education, and health. All full-time students who pass the required examinations get State scholarships. Full-time students in 1969-70 were 8,733. A network of evening and correspondence courses are also offered. The duration of courses is five years in the Mongolian State University Day Departments, while it varies between four to six years in other institutes.

There are now 484 primary and secondary schools. Of these 234 are four-year schools; 198 eight-year schools, and 52 ten-year secondary schools. There are also 19 specialized secondary schools (tekhnikums) and six institutions of higher learning. Besides these there are hundreds of advanced training courses and evening schools for those who wish to acquire vocational training without interrupting their actual occupation.

Teacher education

Kindergarten teachers were trained at the Ulan Bator Pre-School Teacher Training Tekhnikum, while teachers for the first four primary grades were trained in three other teacher training tekhnikums. The duration of studies in these schools was three years.

A Teacher's Institute was set up in 1951 at Ulan Bator. Teachers for grades V to VII took a three-year training course

in this Institute after completing 10 years of schooling. From 1951 to 1958 it turned out 852 teachers for incomplete secondary schools.

In 1958 it was reorganized into a four-year Pedagogical Institute preparing teachers for secondary schools. With the rapid development of the 8-year school, to meet the need for a larger number of teachers with higher qualifications, one-year courses were also established in this Institute in 1963 for the graduates of the three-year training course to raise their qualification for teaching in grade VIII. These one-year courses are given in the evening so that they can take the course while working as teachers. During 1962-63 and 1963-64, 248 teachers obtained diplomas of higher education to enable them to work in the upper grades of secondary schools. From 1955 to 1969, 1,410 more teachers were trained.

The growth in the number of general education schools and of school children created a big demand for teacher training of higher quality in the country. The training of primary school teachers with higher education was therefore incorporated in one of the Faculties of the Institute to produce highly qualified teachers for primary schools. It is a four-year course. The Mongolian State University also initiated the preparation of secondary school teachers of mathematics, physics, chemistry, biology and geography. The period of training at the University is four years.

Management, control and financing. The Great National Khural, an elected one-chamber Parliament, is the highest organ of the State. Between its sessions, a Presidium functions as the collective presidency of the country. The Great National Khural appoints a Council of Ministers, which is the highest executive and administrative body. The Ministry of Education comprises separate departments for pre-school education, school education, finance and planning, equipment, supplies and school construction and publications. There is also a Ministry Board, headed by the Minister. On the basis of collective discussions of the Board, the Minister approves curricula, syllabuses and textbooks. The Minister has two deputies, one of whom directs the work of the Departments of Pre-School Education, and School Education. There is also an Inspector General and inspectors of schools.

State-supported nurseries are under the Ministry of Health, but State-supported kindergartens are under the Ministry of Education. Primary and secondary schools and all schools for young workers and adults are under the Ministry of Education. The Ministry is also responsible for organizing and supervising teacher training for all levels of institutions. Financing the schools, except the nurseries and kindergartens supported by industrial enterprises or agricultural co-operatives, is a State responsibility.

Types, levels and duration. There are at present four teacher training tekhnikums. Two are located at Ulan Bator and the other two in the provinces. One of them, the Pre-School Teacher Training Tekhnikum at Ulan Bator, trains kindergarten teachers only. The course is of three years' duration. The other teacher training tekhnikum at Ulan Bator trains primary school teachers, music teachers, and workers of culture and education. Courses are of three or four years' duration. It also trains primary school teachers through correspondence courses. In addition there is a Correspondence Teacher Training Tekhnikum, also at Ulan Bator. There are two teacher training tekhnikums in the Arkhangai and Khobdo aimaks (provinces), each offering three-year courses.

The training of secondary school teachers is carried out through the Pedagogical Institute and through the University.

The Ulan Bator State Pedagogical Institute, as reorganized in 1958, is the only higher pedagogical institute in the country. It has six faculties:

1. Mongolian Language and Literature Faculty for training teachers of the mother tongue and literature;
2. Physics and Mathematics Faculty;
3. Science and Humanities Faculty, with three sections, each training teachers of chemistry/biology, geography and history respectively;
4. Faculty of Pedagogical Drawing and Painting, and technical training in drawing and painting, which also trains primary school teachers with higher qualifications and other educationalists.

5. Russian Language and Literature Faculty for training teachers of Russian language and literature for all types of schools;

6. Faculty of Physical Culture and Sports, training teachers of physical education and sports coaches.

The duration of courses for full secondary school graduates is four years in all faculties except the Russian Language Faculty where it is five years.

The Pedagogical Institute continues to offer also a one-year course for upgrading the qualification of the former graduates of the Teachers' Institute.

A correspondence department of the Institute offers courses for training teachers in Mongolian language and literature, Russian language, mathematics, physics, history and geography.

The Mongolian State University is also engaged in preparing teachers of mathematics, physics, chemistry, biology and geography for secondary schools. The period of training is four years. These graduates are also entitled to carry out research in institutes or laboratories.

Enrolment figures for selected years in the three primary teacher training tekhnikums and the Pre-School Teacher Training Tekhnikum are given in Tables 1 and 2 respectively, while Table 3 gives the enrolment figure of the Pedagogical Institute.

Table 1. Enrolment in three primary teacher training tekhnikums[1] by grade (grades numbered starting from grade I at the first level)

Year	Total	VIII	IX	X	XI	Graduates
1962/63	1 077	383	294	190	210	241
1965/66	1 300	500	434	347	19	419
1969/70	1 607	490	520	528	69	453

1. A Correspondence Teacher Training Tekhnikum was established in 1964/65 with an enrolment of 120 students in the first year.

Table 2. Enrolment in the Pre-School Teacher Training Tekhnikum by grade (grades numbered starting from grade I at the first level)

Year	Total	VIII	IX	X	Graduates
1962/63	328	170	105	53	31
1965/66	630	250	188	192	123
1969/70	632	229	219	184	300

Table 3. Enrolment in the Pedagogical Institute by year of study

Year	Total	First year	Second year	Third year	Fourth year	Fifth year	Graduates
1962/63	1 315[1]	429	427	241	218	-	226
1964/65	1 414	519	428	270	197	-	433
1969/70	1 563	562	527	591	573	273	356

1. Including students in one-year evening courses: 184 in 1962/63 and 132 in 1964/65.

The number of teachers employed in primary grades I to IV in 1969-70 was 4,362. Increase in the number of pupils in schools has led to the adoption of a double-shift system in many schools and the appointment of a number of teachers not fully qualified, i.e. grade X graduates with only a brief period of training. Teachers in general education, primary and secondary, including evening schools, totalled 7,928 in 1969.

One of the main educational goals outlined in the programme of the Mongolian People's Revolutionary Party for promoting the socialist reconstruction of the country include providing all school-age children with incomplete secondary education (grades V to X), with a view to providing, in the near future, complete secondary education to all children. The projections for 1980 at the primary school level call for an increase in the number of primary school teachers from 2,694 in 1963-64 to 4,000 in 1975-76 and 4,600 in 1980-81, keeping a teacher-pupil ratio of 1:32. To achieve the target of incomplete secondary education (grades V to X), keeping the present

teacher-pupil ratio of 1:22, 5,300 teachers would be needed by 1980-81. This means training at least 200 more secondary school teachers annually.

Student aid. All education is free. The current educational expenditure is about 10% of the national income. The expenditure on scholarships and food is almost equal to that on teachers' salaries. Many students are given scholarships for studies abroad.

Curriculum. The curriculum for general education schools is drawn up by the Education Research Institute and approved by the Ministry of Education; but for the tekhnikums (including teacher training), it is drawn up by the Institutes themselves, and has to be approved by the Ministry.

The curriculum for primary teacher training is given in Table 4. An analysis of the curriculum shows how a close connection is forged between general education and professional training. The subjects taught in the first four grades of school - Mongolian language, arithmetic, nature study, music and singing, drawing, manual training and physical education - are found in the teacher training curriculum together with the methodology for teaching them so that matter and method become integrated. In the professional area, along with the methodology of teaching subject matter, a significant addition is the methodology of working with children. The distribution of teaching practice through all the three years is also significant; and the time allotted for it - 134 periods - though a small proportion of the total time (3,470 periods), should be quite ample, as many of the other aspects of student teaching are covered in other areas of study.

Table 4. Curriculum for teacher training tekhnikums
(time allocation in periods per week)

Approved on 4 August 1964 for the 1964/65 academic year
Speciality: primary school teachers

Subject	Course (year) course I 1st term 14 wks.	course I 2nd term 20 wks.	course II 3rd term 14 wks.	course II 4th term 18 wks.	course III 5th term 17 wks.	course III 6th term 15 wks.	Total	Examinations (terms)
1. Mongolian language, and methodology of teaching it								
(a) Mongolian language	2(28)	2(40)	2(28)	2(36)	2(34)	2(30)	196	2.4
(b) Methodology of teaching Mongolian		2(40)	2(28)	2(36)	2(34)	1(15)	153	5
(c) Penmanship, and methodology of teaching it	1(14)	1(20)	1(14)	1(18)	1(17)	-	83	-
2. Literature								
(a) General literature	4(56)	2(40)	-	-	-	-	96	-
(b) Mongolian and children's literature	-	-	1(14)	1(18)	2(34)	2(30)	96	-
3. Mathematics and methodology of teaching it								
(a) Arithmetic	2(28)	2(40)	2(28)	2(36)	2(34)	2(30)	196	2.4
(b) Methodology of teaching arithmetic		2(40)	2(28)	2(36)	2(34)	1(15)	153	5
(c) Algebra	3(42)	2(40)	2(28)	-	-	-	110	-
(d) Geometry and trigonometry	2(28)	2(40)	2(28)	2(36)	2(34)	-	166	-
4. Physics (with astronomy)	4(56)	3(60)	2(28)	2(36)	-	-	180	4
5. History								
(a) History of the MPR	-	-	2(28)	2(36)	-	-	64	-
(b) Social science	-	-	-	-	3(51)	4(60)	111	-
6. Geography								
(a) Economic geography of foreign countries	2(28)	2(40)	-	-	-	-	68	-
(b) Geography of the MPR	-	-	3(42)	3(54)	-	-	96	-
7. Biology and methodology of teaching it								
(a) Anatomy and physiology	2(28)	2(40)	-	-	-	-	68	-
(b) Fundamental of biology	-	-	2(28)	2(36)	-	-	64	-
(c) Methodology of teaching nature study	-	1(20)	2(28)	2(36)	-	-	84	4
8. Fundamentals of agriculture	2(28)	1(20)	-	-	-	-	48	-

Table 4. Curriculum for teacher training tekhnikums (Cont'd)
(time allocation in periods per week)

Approved on 4 August 1964 for the 1964/65 academic year
Speciality: primary school teachers

Subject	Course (year)						Total	Examinations (terms)
	course I		course II		course III			
	1st term 14 wks.	2nd term 20 wks.	3rd term 14 wks.	4th term 18 wks.	5th term 17 wks.	6th term 15 wks.		
9. Chemistry and mineralogy	2(28)	2(40)	2(28)	2(36)	-	-	132	-
10. Foreign language (Russian)	3(42)	2(40)	2(28)	2(36)	2(34)	2(30)	210	6
11. Theory of education (pedagogy)	2(28)	2(40)	1(14)	1(18)	2(34)	2(30)	164	-
12. General and child psychology	-	-	1(14)	1(18)	2(34)	2(30)	96	-
13. School hygiene	-	-	-	-	2(34)	2(30)	64	-
14. Methodology of education work with children	-	-	-	-	2(34)	-	-	-
15. Music and singing, and method. of teaching them	2(28)	2(40)	2(28)	2(36)	1(17)	1(15)	164	-
16. Drawing and manual training, and method. of teaching them								
(a) Drawing, and method. of teaching it	1(14)	1(20)	1(14)	1(18)	1(17)	1(15)	98	-
(b) Manual training, and methodology of teaching it	1(14)	1(20)	1(14)	1(18)	2(34)	2(30)	130	-
(c) Fundamentals of domestic science	-	-	-	-	2(34)	2(30)	64	-
17. Physical education, and method. of teaching it	1(14)	1(20)	1(14)	2(36)	2(34)	2(30)	148	-
18. Teaching practice	-	1(20)	1(14)	2(36)	2(34)	2(30)	134	-
Total periods	36(504)	36(720)	37(518)	37(666)	36(612)	30(450)	3 470	-

State examinations:
1. Social science (oral)
2. Theory of education (pedagogy) (oral)
3. Mongolian, and methodology of teaching it (oral and written)
4. Arithmetic, and methodology of teaching it (oral and written)

In-service education

In-service education has been provided as a built-in part of the programme of all education. In teacher education the Correspondence Teacher Education Tekhnikum offers courses for primary teachers in service, whereas for upgrading the qualifications of the three-year graduates of teacher education tekhnikums, a one-year course is provided in the Pedagogical Institute. The correspondence department of the Pedagogical Institute offers courses for training teachers in Mongolian, Russian, mathematics, physics, history and geography.

NEPAL

Education system

The education system of Nepal has developed rapidly in the last two decades. In 1951 there were 310 primary and middle schools, 11 high schools, one college, one teacher training centre, one technical school, a few centres for adult education, and a bureau of publications. By September 1954, when the Ministry of Education was created, the number of primary schools had increased to 921. Their types, numbers and the numbers of teachers in each were as follows:

Types of primary schools	No. of schools	No. of teachers
English	667	1 007
Sanskrit schools	233	233
Basic schools	21	38

Present structure and organization. At the beginning of 1970, schools in Nepal are either "primary", having grades I to V, or "middle", having grades I to VII or VIII, or "high", with either grades I to X or grades VI to X. [1]

One of the first steps the Ministry of Education took after its creation in 1954 was to appoint a 56-member National Education Planning Commission. Among several targets in the long-range development programme of education mapped out by this commission, four stand out prominently: (a) universal,

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Text based on response to the Institute's questionnaire through the courtesy of the Ministry of Education (Nepal) supplemented by information from other documents.

1. This refers to the situation prior to the reorganization of education initiated in 1972. For the new structure and reform of education in Nepal, refer to the *Supplement* to the Bulletin of the Unesco Regional Office for Education in Asia (Vol. VI, No. 2, March 1972).

free compulsory primary education by 1985; (b) free, multipurpose (vocational) secondary education available in the ratio of one school for every 10,000 population by 1975; (c) coordination of higher education through a national university by 1965; and (d) adult education for all who desire it by 1965.

Primary education today is given through the medium of Nepali, starting in grade I for children who have completed 5 years of age. Secondary education is also imparted through the medium of Nepali, from grades VI to X, at the end of which there is a National School Leaving Certificate Examination.[2] Higher education, all of which is controlled by the University, is mainly through the medium of English, and consists of a two-year course leading to the Intermediate Examination followed by a two-year course leading to the Bachelor's Degree examination. These two courses are at present available in arts, science, commerce, education and Sanskrit. Following the full degree course there is a two-year course leading to the Master's Degree in many subjects including some scientific subjects and a two-year course leading to a Bachelor of Law Degree.

Teacher education

Mobile normal schools were created in 1954 to travel to all parts of Nepal to train hundreds of primary school teachers. A College of Education was established to train normal school instructors, teachers for the multipurpose high schools, and school administrators.

A National Teacher Training Centre for short-term training of primary school teachers was opened in Kathmandu, the capital of Nepal, on 9 September 1954. There are now five Primary School Teacher Training Centres (PSTTCs), two of which are permanent centres. The following table shows the progress made in primary teacher training.

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2. For recent reorganization, refer to the *Supplement* to the Bulletin of the Unesco Regional Office for Education in Asia (Vol. VI, No. 2, March 1972).

Year	Pre-service		In-service		Total
	Male	Female	Male	Female	
1955	82	13	-	-	118
1956	357	28	-	-	385
1957	114	10	-	-	124
1958	538	32	21	-	591
1959	344	50	173	-	567
1960	246	20	247	-	513
1961	578	32	-	-	610
1962	409	26	-		435
1963	174	-	188	1	363
1964	446	18	132	2	598
1965	487	-	273	-	760
1966	...	...	...	...	596
1967	...	...	...	...	649

An extension programme was started in 1967. Under this programme untrained primary school teachers receive training during summer or winter vacations for three consecutive years covering the 10 months' course of the Primary Teacher Training Centre.

There are two colleges for secondary teacher training which are located in the most densely populated areas of the country. While there are no institutions located in rural areas, rural students are directly recruited to be trained in the existing centres.

The five centres for primary teacher training are under the College of Education, which is located at Kathmandu. Four of them are located outside the capital. The fifth which is also an intermediate education college for secondary teacher training is an extension centre located outside the capital at Birgung in the Terrai region.

Management, control and financing. For administration, teacher education is under an Under-Secretary for Teacher Training and Placement.

The country is divided into 14 zones, in each of which there is an inspector with a deputy in charge of the primary

and secondary schools in his zone. The 14 zones are further divided into a total of 75 districts each with a district inspector and a deputy responsible for the primary schools and literacy classes in his district. The zonal organization is proposed to be discontinued and the District Inspectors will also be replaced then by District Education Officers.

Types, levels and duration. Primary school teachers are trained through a one-year professional course, based on general education at a level at least corresponding to grade VIII in secondary school. A two-year course is also given for candidates with lower qualifications, but this is gradually being dropped. In addition, a very limited number has been trained through an extension programme. A certificate for teaching is awarded to all who qualify.

Those who matriculate after 10 years of schooling are admitted to Intermediate Education (I. Ed.) course, a two-year course in the College of Education for teacher education generally oriented to primary and lower secondary school teaching. Students who have completed I. Ed. course are enrolled for the B. Ed. degree in the College of Education. It has a duration of two years, and those who graduate are qualified to teach in secondary schools, i.e. grades VIII to X. A one-year B. Ed. course is offered for those who are graduates of universities.

Fresh recruits with 8 years' schooling are given an emergency certification which entitles them to teach in primary schools; but they must qualify for a renewed certificate within three years by attending either an extension programme or a regular teacher training programme, or by upgrading academic qualifications. Those who have one year of training after 8 years' study are given a regular certificate which entitles them to teach primary grades for 5 years, after which they must qualify for renewal by taking at least one extension programme. The I. Ed. graduates get a life-long certificate to teach in primary and middle schools.

The idea of a "mobile team" to take care of extension programmes has been accepted in principle by the Ministry of Education since 1969.

Admission and enrolment. The minimum qualification for admission to the primary school teacher training courses is 8 years of schooling. The minimum age requirement is 15 years. No written tests are administered at the time of the initial selection, but a written test comprising general knowledge, academic competency and professional interests is given as a qualifying test at the end of one month's probation. This is followed by an oral test at the time of the interview. A physical examination is conducted in cases of doubt about fitness. Selection is based on district quotas and on the marks obtained in the district-level interviews. However, women candidates and member of backward minority groups are given preference provided they satisfy certain minimum standards. There is a qualifying test at the end of the first month of the session. Only those who pass are allowed to continue training. Students enrolled for training in 1969-70 numbered 1,050.

For admission to the secondary teacher training programme in the university, the final grade in secondary school, grade in secondary school leaving examination or a university degree (B. A., B. Sc. or B. Com.) are the main qualifications. A certificate of good character from the principal is required. An interview is used to check physical fitness, qualifications, teaching experience and speech and voice. A new test constructed for the admission of students in intermediate education class is also given. Those with a university degree (B. A., B. Sc., or B. Com.) will be admitted for the one-year training programme leading to B. Ed. degree; the secondary school leavers have to join a four-year B. Ed. degree course (first two years of which is for I. Ed. and the next two years for B. Ed.).

The number of students enrolled in the three consecutive years from 1966-68 and the number who qualified to teach are given in Table 1.

Only 25% of the teachers now in position are trained. This shows the magnitude of the problem of teacher shortage.

Student aid. All students in institutions for primary teacher training receive scholarships or stipends. They are all required to serve their schools for at least five years. Textbooks are provided free.

Table 1. Number of students enrolled in teacher training institutions, and the number of students graduated, in 1966, 1967 and 1968

Type of teacher training institutions	No. of students enrolled			No. of students graduated		
	1966	1967	1968	1966	1967	1967
Primary teacher training	568	483	770	505[1]	449	682
Secondary teacher training	80	124	138	10	35	45

1. 464 male and 41 female.

Problems encountered in the recruitment of candidates are the low salary of primary school teachers, the lack of mobility among primary school teachers, the dearth of facilities and the absence of standard rules and regulations for recruitment.

Those who enter institutions for secondary teacher training similarly get stipends, the value of which varies according to the level of the course.

Facilities. Two centres, Kathmandu and Pokhara, are permanently accommodated in spacious buildings of very high standard. Two other centres, Birgunj and Palpa, were accommodated in old buildings constructed for other purposes. One centre, Dharan, had temporary accommodation and improvised facilities. At present, only the two first mentioned centres have proper facilities for storing and preserving teaching equipment. Only three centres have science laboratories and libraries; two have arts and crafts rooms and only one has an assembly hall. All centres have lecture rooms.

Organization of instruction. Enrolment in all the five Primary School Teacher Training Centres and one institution for secondary teacher training is less than 300, while it is between 300 and 500 in the other institutions for secondary teacher training. The number admitted is dictated mainly by the availability of accommodation and facilities.

In the Primary School Teacher Training Centres, the teaching load of teacher educators is 18 hours per week on an average. Teaching time per class per week is 39 hours. The size of each class group varies from 40 to 60. Each group is normally subdivided into groups of about 15 each for small group teaching.

The class size depends mainly upon the capacity of the classrooms and the teaching loads of the instructors. As the students need intensive skill training and training in modern methods, these large classes are considered a handicap. But there are not enough rooms for organizing smaller groups. In the institutions for secondary teacher training, class size is approximately between 41-54.

The staff in each Primary School Teacher Training Centre is made up of one headmaster and a few instructors, all of whom have nearly the same teaching load. The ratio of teachers to students in the Primary Teacher Training Centres is 1 to 24. However, the staff-student ratio for optional subjects is generally 1 to 10. This ratio is 1 to 20 in one institution for secondary teacher training which has less than 300 enrolment and 1 to 9 in the other, which has more than 300 enrolment.

A study of the instructional programme of PSTTCs carried out in 1968 revealed that:

a) lecturing and classroom questioning strongly prevailed in the instruction pattern;

b) questions from teachers to students were far more frequent than questions from students to teachers or from students to students;

c) textbooks were generally not in use, and note-taking was surprisingly scanty;

d) the blackboard was the only teaching aid regularly used. It was mainly used for texts (words and sentences);

e) practical work was strictly limited to demonstrations by teachers, assisted in a few cases by students;

f) the contents of instruction mostly consisted of large-scale surveys at a high level of abstraction. Instructors seemed generally more concerned with the logical organization of ideas (definitions and classifications) than their application to empirical situations and events.

Curriculum. A syllabus for primary teacher training was developed in 1962, on the basis of the new primary school curriculum. Essentially, this syllabus prescribes a course in foundations of education (history, sociology, psychology and philosophy), a course in school organization and administration, a course in general methods of teaching, and separate courses in the methods of teaching in their application to the different subject areas. A variety of teaching approaches, developed during the crusade of "progressivism" in the 1930s, were expected to be presented through the lecture approach. In addition, some introduction was to be given in recent innovations, like programmed instruction, film, radio and television and language laboratory. During practice teaching students were to be left mostly to their own resources. This was an ambitious programme which did not work satisfactorily. Hence in 1970 the curriculum was revised. The new curriculum for teacher training will be adjusted to the new curriculum for primary school, especially to those revisions concerning the scope and content of particular subject areas. Specific objectives will be largely expressed in terms of terminal student-teacher behaviour, and the contents organized in units with learning activities, in "steps". In subject areas where there is a shortage of well qualified instructors, a broad descriptive format will be used. It is realized that upgrading the qualifications of staff members in particular subject areas may be necessary, if only to get systematic teaching of these subjects started in all centres.

For general education, there is a full year's course for those who enter the Primary School Teacher Training Centres, with qualification below grade VIII; the course includes English, Nepali, social studies, mathematics, Panchayat,[3] science and physical education. No general education subjects are offered in the curriculum for secondary training.

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3. Village administration

The curriculum of the Primary School Teacher Training Centres is usually revised by a workshop group which is composed of the instructors of different centres. The college curriculum is set by the university in consultation with the teaching staff.

The professional curriculum of teacher training for the secondary level consists of papers on principles of education, psychology and guidance, methods of teaching, history of education and educational administration and educational research. Student teaching is done after the final examination.

Student teaching. In the centres, methodology courses on language arts, mathematics, social studies and science (planned for each grade) are to be completed before the student teaching phase of training is taken up. No general education for upgrading content knowledge is separately given. Introduction to education, curriculum making, child psychology, educational psychology, methods of teaching, instructional materials and school organization are among the professional education courses generally given after practice teaching. Model lesson plans and observation sheets are given to the student-teachers when they go for practice teaching.

There are three phases in the student teaching programme for primary level teaching. The first phase consists of observation of special demonstration lessons. The second phase consists of observation of regular classroom teaching. The third phase is the actual practice teaching which lasts for 45 days and occurs at the middle or end of the training period, as the weather permits (but not before at least five months of instruction at the centre).

Only Pokhara and Kathmandu training institutions have their own laboratory schools. Practice teaching is done either in laboratory schools or co-operating schools off-campus. Other purposes served by the laboratory schools are special observation based on theory classes, research, experimentation, and testing.

The activities included in the student teaching programme are preparing teaching materials, helping children in their games and other recreational activities, participating in field trips, excursions, and scouting activities of children, studying

a topic in the area of child development given by the supervisors in the laboratory schools, administering tests and keeping records of pupil's progress, organizing sports activities, teaching literacy classes in the community schools, and participating in village development programmes.

Students enrolled for secondary teacher training go to schools for 10 weeks of practice teaching after the final examination, and there they observe, prepare for, and participate in teaching.

Evaluation. Two examinations for evaluating teacher training candidates are held in the middle and at the end of the semester. Attendance, class activities and assignments are also considered. Evaluation of student teaching is done on the basis of 100 marks distributed as follows:

1.	Observation	10 marks
2.	Investigation of school condition	10
3.	Case study	20
4.	Teaching	
	a) Actual teaching planning	10
	b) Personal and social qualities	6
	c) Mastery of subject matter	8
	d) Teaching procedure	10
	e) Class control and management	6
	f) Co-curricular activities	4
	g) Demonstration lesson	10
	h) Use of teaching aids	6
		100

The practice teaching of the I. Ed. students is evaluated by a Board of Evaluators made up of one representative from the university, one from the college faculty and one of the regular supervisors.

Teacher educators

Qualifications. Graduation from the College of Education is the usual qualification of the teacher educators in the Primary School Teacher Training Centres. The curriculum of the College of Education is designed only to serve the preparation of teachers for secondary schools. Keeping in mind that instruction

in the PSTTCs, though carried out at the secondary level, is concerned with preparation for primary school teaching, this programme suffers from distinct deficiencies. Three major shortcomings have been pointed out:

1. the information given about primary education is inadequate, particularly the information relevant to primary education in Nepal;
2. insufficient attention is given to the preparation of prospective teacher educators in the kinds of practical activities important in the primary school and in primary teacher education;
3. teaching practice is at present restricted to one month in the uppermost classes in the secondary school.

The academic background of the professional staff members in the PSTTC system is presented in Table 2 showing the total number of degrees as distributed among the different academic study areas:

Table 2. Academic background of professional staff members

Academic study area	Masters' Degree	Bachelors' Degree
Education	11	27
Arts	6	21
Science	-	1
Commerce	-	1
Shastri (Sanskrit)	-	1
Health and Physical Education	-	1
	17	52

To upgrade the qualifications of the professional staff, a number of programmes have been launched with assistance from Unesco/UNICEF and bilateral sources. The most important of these programmes is fellowships for study abroad. The second is the organization of workshops. Short in-service courses for teachers were organized in 1969 as an experimental measure in "clinical approach" to relate school learning with out-of-school experiences.

Survey of teacher education

In the College of Education the minimum qualification for appointment is a masters' degree, preferably with a background of education and teaching experience.

Recruitment. Teacher educators are recruited as government servants by the Ministry of Education. The total number of teacher educators in institutions for primary teacher training has been fairly stable at a level of 50-60 during 1967-1970. For the most part, they are recruited from the College of Education, Kathmandu, and the output of graduates from the College of Education has not been sufficient during these years. The total number of teacher educators in 1969-1970 in the PSTTCs list increased only to 57 from 43 in 1968.

Staff gradations and duties. The Primary School Teacher Training Centres are each under a headmaster assisted by instructors. All the staff members teach and supervise practice teaching. They also teach in-service education courses. In the College of Education the Principal has administrative work and academic supervision only. The Vice-Principal functions as the academic assistant. He shares teaching work with the lecturers. In-service education of teachers in lower and higher secondary schools to upgrade teaching in the subject areas of mathematics, science and social studies is also undertaken by the College staff.

In-service education. In-service education is regarded as a proper function of every teacher training centre. Primary School Teacher Training Centres carry on an extension programme for two months each year for three consecutive years for a group. For secondary teachers, the College of Education conducts winter workshops for two months each year, in different subject areas such as social studies, mathematics, science and evaluation. Stipends are paid to the participants during the periods attended, but no other incentives are available to the teachers for taking up in-service education.

Research. Research is done by the research department of the College of Education. Each year three or four projects are carried out. The researchers in the College are given release of time and their studies are published by the College in its quarterly journal. No financial support is available from any source except government.

PAKISTAN

Education system

Present structure and organization.[1] The present system of school education covers 12 years, divided into four stages: primary (grades I to V), middle (grades VI to VIII), high (grades IX to X) and intermediate (grades XI to XII), with diversification into general and technical education foreshadowed in the middle school but becoming definite in the last stages.

In 1969-70 there were 70,040 primary schools with an enrolment of 10.5 million, 5,080 middle schools, with an enrolment of 1.94 million, and 5,320 high schools with an enrolment of 0.77 million. There were 75 vocational high schools/institutes, 41 polytechnics, 295 intermediate colleges with an enrolment of 0.340 million, 271 degree colleges with an enrolment of 0.118 million, and 8 universities.

Free and compulsory education is now being provided for 5 years. The objective is to provide free and compulsory education up to grade VIII. The secondary level will comprise four years.

Teacher education

The system of teacher education in Pakistan dates back to the developments in the first quarter of the nineteenth century. The first normal school was set up in the Huzuri Bagh, Lahore, on 27 May 1856 and the first secondary teacher training college

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Text based on response to the Institute's questionnaire through the courtesy of the Ministry of Education (Pakistan) supplemented by information from other documents.

1. A new Education Policy was announced by the Government of Pakistan, envisaging important changes in the education system. (see for a report of the New Education Policy, the *Supplement* to the Bulletin of the Unesco Regional Office for Education in Asia, Vol. VII, No. 1, September 1972).

was established around 1880, also in Lahore. Bachelor of Teaching (B. T.) classes, extending over a period of two years, were started in this Training College around 1905.

The Primary and Secondary Education Committee of the Pakistan Education Conference of 1947 noted that the introduction of free and compulsory education would require a large corps of teachers and suggested that the Provinces should adopt special measures to meet this need. In this connection it suggested the adoption of short-term courses for training. In particular, the Committee stressed the desirability of adding research departments to training institutions for the study of special problems related to teaching. The Advisory Board of Education recommended in 1949 that the minimum educational qualification for teacher training should be matriculation. The Commission on National Education (1950) made inter alia the following recommendations concerning teacher education:

1. minimum qualifications for admission and duration of training courses should be raised;
2. there should be a college for the training of teachers for training colleges;
3. training of teachers of science and of practical arts and crafts should be given high priority;
4. refresher courses for teachers should be organized;
5. post-graduate study in education at the doctorate level should be provided;
6. fundamental academic research in education should be centered in the training colleges and universities. Functional and practical research should be carried out in the Institutes of Education.

Management, control and financing. Teacher education is handled by the Central Ministry of Education, Provincial Education Departments, and their Directorates of Education. The institutions for primary teacher training are controlled and administered by an Inspector of Training Institutions under the overall direction and supervision of the Regional Directors of Education. The teachers' colleges are controlled directly by the Regional Directors.

The Directors of the Education Extension Centres for the in-service education of teachers worked under the control of the Regional Directors of Education. The heads of the Institutes of Education and Research are Directors, who work under the universities of which they are a part.

Most of the institutions for primary teacher training are directly managed and financed by the Government. The few private institutions that there are also get financial aid from the Government. No tuition fee is charged in any institution. The institutions for secondary teacher training are also managed and financed by the Government except university departments, which as constituents of universities are autonomous institutions, and which receive grants from the Government.

Types, levels and duration. For primary teacher training there are 77 teacher training schools while for secondary teacher training there are six training institutions, four colleges, 11 teachers' colleges, and two university departments. In addition, there are 17 secondary-level institutions giving both primary and lower secondary teacher training. The institutions for primary-level training are generally known as teacher training institutions or normal schools or teacher training schools and prepare candidates for the Primary Teacher Certificate (P. T. C.) which is of two years' duration. They include teacher training schools preparing for the Senior Vernacular Certificate (S. V.) and the Senior Vernacular (Agriculture) Certificate (S. V. Agr.). The Junior Vernacular Certificate (J. V.) course which was of one year's duration has been replaced since 1970 by the P. T. C. of two years' duration. The physical education colleges prepare SSLC holders for the Junior Diploma in Physical Education who teach in primary, middle and sometimes even in high schools. They also prepare graduates for a diploma in physical education, who are eligible to be employed in colleges. Teacher training schools (or colleges) in the Lahore region prepare teachers of English and other subjects, except oriental languages, for the middle schools (grades VI to VIII) and award them a Certificate of Teaching (C. T.).

The duration of training, the number of years of schooling preceding it and the certificate or degree awarded for primary and secondary teacher training are summarized in Table 1.

Table 1. Duration of training

Type of teacher training programme	Previous schooling			Length of time in the teacher training institutions	Certificate, Diploma, or Degree awarded
	Primary	Secondary	University B.A., B. Sc.		
Primary teacher training	5	5	-	1 year - 2 years	Certificate of Education, Primary Teacher Certificate
Secondary teacher training	5	7	2	1 year	Bachelor of Education
Primary and secondary					
a) Primary teacher training	5	7	-	1 year	Certificate in Teaching
b) Secondary teacher training	5	7	2	2 years	Bachelor of Education

In addition to the regular training programmes, there are certain programmes which are designed for specific purposes. Education Extension Centres offer short training courses of various durations ranging from two to eight weeks for secondary school personnel. They also arrange courses of one academic year's duration for teachers of agriculture, industrial arts and commercial subjects. The Refresher Course Training Centres offer short courses of in-service training of two months' duration to primary school teachers. The Institute of Education and Research in Lahore offers courses leading to post-graduate and research degrees; M. A. (Ed.), M. Ed., and Ph. D. The duration of the M. Ed. (or M. A. in Education) course is one year after completing the B. Ed. course. The Agriculture University offers courses leading to post-graduate B. Ed. (Agriculture) and M. Ed. (Agriculture). For B. Ed. one year after B. Sc. in Agriculture or a related discipline and for M. Ed., two years after B. Sc. or one year after M. Sc. are required.

Admission and enrolment. For the primary teacher training programme students are admitted on the basis of a pass in the secondary school certificate examination. Credit is given for service as an untrained teacher, distinction in the field of sports and games and other co-curricular interests in addition to scholastic activities. A certificate of good character from the institution last attended is valued. An interview is held to assess general knowledge, knowledge of school subjects, personality, character, academic career, age and health. Admission tests are given in some institutions to assess general knowledge, knowledge of school subjects, as well as aptitude for teaching. A physical and medical examination is arranged. A certain percentage is allocated for teachers' sons, ex-servicemen, backward communities, and minorities. For the secondary teacher training programme, a B. A. or B. Sc. degree is a prerequisite. The prescribed age limits are strictly followed.

The number of students enrolled in 1966-1968 and the number of graduates from these institutions during the same period are given in Tables 2 and 3.

Table 2. Number of students enrolled in 1966-1968

Type of teacher training institutions	Number of students enrolled								
	1966-67			1967-68			1968-69[1]		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	10 819	2 312	13 131	10 049	2 478	12 527	8 693	1 762	10 455
Secondary teacher training	2 588	1 041	3 629	2 938	1 353	4 291	3 196	1 688	4 864

1. Data for the year 1968/69 on secondary teacher training are provisional estimates.

Table 3. Number of students graduated in 1966-1968

Type of teacher training institutions	Number of students graduated								
	1966-67			1967-68			1968-69[1]		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary teacher training	12 766	3 959	16 725	14 686	3 141	17 827	8 359	2 834	11 193
Secondary teacher training	2 659	1 049	3 708	2 720	1 274	3 994	2 790	1 500	4 290

1. Data for the year 1968/69 on secondary teacher training are provisional estimates.

Organization of instruction. By and large, teacher training institutions, both primary and secondary, tend to be relatively small in terms of the size of enrolment - the majority of institutions having around 300 enrolled students. The size of the institutions seems to be dictated by the extent of facilities available in an area for practice teaching.

The class size is generally about 100, but smaller groups are formed for special purposes and special classes. The determinant of class size is partly the roll strength and the size of the teaching staff. The teacher-student ratio varies from 1:13 to 1:30 in the institutions for primary teacher training and from 1:18 to 1:30 in the institutions for secondary teacher training.

The teaching staff is employed full time. There are, however, a few exceptions, such as music teachers or medical officers to teach hygiene. The ratio of teachers to students works satisfactorily though an improvement is contemplated for better teaching and supervision. As it is, a teacher has to work 14 to 27 hours a week unless he has administrative or supervisory duties, in which case his teaching workload is lightened. This teaching load includes the time devoted for the supervision of student teaching as well.

The traditional lecture method still holds the field in most institutions for primary teacher training, but some of these have also introduced the assignment system. Some have also started to make use of new techniques like group discussions, seminars, etc. Arrangements are progressing for introducing educational television in selected centres.

Curriculum. The following subjects are included in the professional education part of the two-year primary teacher training programme - principles of education and methods of teaching, educational psychology and guidance, school organization, and the teaching of school subjects.

In the secondary teacher training programme, (B. Ed. course) the following papers under professional education are required: (1) educational psychology; (2) philosophy of education and curriculum development; (3) school organization;

(4) history of education; (5) teaching of English; (6) teaching of Islamiat; (7) one of the following electives - teaching of history, teaching of geography, teaching of Urdu and teaching of home economics; and, (8) one of the optionals - guidance or everyday science.

Student teaching. Institutions for primary and secondary teacher training have in most cases practice schools attached to them. Where training institutions do not have attached practice schools, practice teaching is arranged in other schools in the locality. Teaching practice is done in two terms. The first is a short-term of three weeks during the first year, and the second is a long-term of six weeks during the second year. The trainees are to give a prescribed number of supervised lessons, usually three.

Evaluation. There are many variations in the system of evaluation of primary teacher training in the various regions of Pakistan. An external examination with 11 papers in theory subjects is held by the Regional Directorates at the end of the course. In the theory part of the examination, internal assessment is not given any weightage, while in the examination in teaching practice, both internal and external assessment are taken into account. Three lessons given are evaluated.

The examination for secondary teacher training resulting in the B. T. /B. Ed. Degree is held by the university concerned. A candidate must pass both in theory and in practice teaching. Participation in social work is a prerequisite for the award of the B. T. degree. Every student is expected to have also participated in a Scout Master's training camp.

Teacher educators

Qualifications. The minimum qualification for teacher educators in institutions for primary teacher training is a bachelor's degree in arts or science with a degree or diploma in education. With the existing shortage of staff, however, it has not been possible to adhere to this norm and undergraduate teachers (i. e. Senior Vernacular teachers) and fresh trained graduates have sometimes to be appointed in teacher training institutions.

For teaching in institutions for secondary teacher training, a master's degree in arts or science with a degree or diploma in education is required. In the University departments or Institutes of Education and Research, a master's degree in education is also considered essential. These qualifications are subject to revision from time to time. Selected teacher educators, however, are being sent abroad each year for further studies in different areas. Others are encouraged to improve their professional qualifications while in service by short-term refresher courses, seminars, study tours, and advanced courses in the country or abroad. There is now a rapidly growing cadre of well qualified teacher educators.

Recruitment. In the appointment of instructors for primary teacher training, the following points are considered: the academic and professional qualifications of a candidate, aptitude for teaching, and physical fitness. Candidates with higher professional qualifications and who are not ordinarily over 35 years of age are directly recruited to teach in institutions for secondary teacher training through the Public Service Commission in the case of government institutions, and in the case of university teachers, through the University Selection Board. Appointment by transfer or promotion from the general cadre is also permissible in the case of institutions for primary and secondary teacher training under the Government.

In-service education

In-service training programmes are in the main conducted by the Extension Centres. Regional Education Extension Centres were established in 1964 at Karachi, Khanpur, Sind and Abbotabad to cope with the in-service needs of the secondary school personnel. These centres conduct courses also for Headmasters, Assistant District Inspectors, District Inspectors and normal school/primary training school instructors. Government In-service Teacher Training Centres were set up at Peshawar, Rawalpindi, Hyderabad and Lahore to conduct in-service courses for teachers of J. V., S. V., and C. T. qualifications. The Division of Teacher Training Extension and Short Courses, West Pakistan Agricultural University, Lyallpur, is also engaged in in-service training. For primary teachers,

Refresher Course Training Centres are organized to provide in-service courses usually of two months' duration, and four courses in a year. For secondary teachers the Education Extension Centres offer short courses of various durations ranging from two to eight weeks. They also arrange courses of one academic year's duration for teachers of agriculture, industrial arts and commercial subjects with necessary assistance from other agencies. Short in-service courses of one to three months are available in the Agriculture University.

To encourage teachers to continue their professional education, certificates are awarded on completion of courses of in-service education. Travelling and daily allowances are provided. When the teachers improve their professional qualifications they get better salary grades.

The Education Extension Centres have organized a very large numbers of short courses of two to eight weeks' duration in different subject areas such as teaching of English, languages, science, mathematics, social studies, geography, arts and crafts, agriculture, industrial arts, home economics, religious education, library services, music, health education, civil defence, testing, evaluation, etc. The Centres have held several long courses of one academic year's duration in agriculture, in industrial arts and in commercial subjects. The centres also conduct study conferences on subject areas like English, geography and science for the teachers of secondary and higher secondary schools.

Research

The institutions for primary teacher training do not have research programmes. However, the University Departments of Education, the Institutes of Education and Research, and some institutions for secondary teacher training undertake research work. Research is encouraged by the Government. The stipends awarded by the Government to students of institutions for secondary teacher training are intended to cover the cost of studies including research. Some research organizations also finance specific research projects.

PHILIPPINES

Education system

The Philippine education system has evolved through the interplay of a variety of influences. In 1938 the administration of education moved into Filipino hands, and from that time on till the present, educational reform has gone on, with a continuing search for new orientations to make it more relevant to the needs of national development.

Today there are two sets of schools, one public and the other private. Pre-school education - nursery and kindergarten - is available on a limited scale. Elementary education covers six grades made up of four years of primary and two years of intermediate grades. Grade VII is provided in some private schools, but as part of elementary education all public elementary schools are community schools. Secondary education is given in four types of four-year high schools:

1. The 2-2 plan general secondary school.
2. Vocational trade school.
3. Agricultural or fishery school.
4. The barrio high school.

Higher education is provided in colleges and universities.

Public schools are under the supervision of the Bureau of Public Schools and the Bureau of Vocational Education and the chartered colleges and universities. Private schools are sectarian or non-sectarian, and may be stock, non-stock or foundation corporations. The proportionate distribution of the school population in public and private schools, as of 1967-1968, shows

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Text based in response to the Institute's questionnaire through the courtesy of the Department of Education (Philippines) supplemented by information from documents.

that 96% of the school children are in the public elementary schools, 40% in the public secondary schools, and 5% in the government colleges and universities.

There were 659 collegiate institutions in 1968-69 of which 566 were private schools, 22 were chartered state colleges and universities, 65 were under the Bureau of Vocational Education and 6 under the Bureau of Public Schools.

In the performance of the basic educational tasks, various auxiliary services are provided primarily for the welfare of children. Such services include guidance, health, school feeding, and applied nutrition. A network of educational broadcasts provide enrichment radio lessons. A programme of educational television is also available in the Greater Manila area.

Teacher education

The first step taken for the development of teacher education was the establishment of the Philippine Normal School for men in Manila in 1863 by the Spanish administration. For the preparation of women teachers a few normal schools were later founded. Under the American rule, many normal schools were opened. The Philippine Normal School in Manila was reorganized in 1901, followed by the opening of regional normal schools in Cebu, Ilocos Norte, Albay, Iloilo and Pangasinan. In 1918 a two-year collegiate course was offered in the Philippine Normal School. In 1936 junior normal college courses were started in the eight regional normal schools then existing. In 1950 the Philippine Normal School became a degree-granting college with a four-year curriculum starting in 1952-53. In 1955, the minimum professional qualification for elementary school teachers was raised to graduation in a four-year teacher training course.

Management, control and financing. Education is a government responsibility. It is administered by the Department of Education headed by the Secretary of Education who is a member of the Cabinet of the President of the Philippines. He also serves as Chairman of the Board of National Education, which is responsible for determining the educational policy. The Board and the Department cause the enactment of educational legislation.

Educational laws are also enacted by Congress on its own initiative. These laws are the sources of the educational policy.

The schools are administered by the Department of Education through the Bureau of Public Schools, Bureau of Vocational Education, and Bureau of Private Schools, depending on whether the schools are public, vocational, or private. Each Bureau has a Director and a system of superintendencies under each of which all schools are supervised and through which feedback of reports and information from the field is coursed. Each superintendent has a team of school supervisors responsible for various aspects of school supervision.

Public normal schools and teachers' colleges are under the Teacher Education Unit of the Bureau of Public Schools while the private teacher training institutions, for both primary and secondary levels, are under the Bureau of Private Schools. Normal schools and teachers' colleges are under the administration of superintendents who are also directly responsible to the Director of Public Schools.

State colleges have their own charter but, in general, the Secretary of Education is the principal officer of the Government to deal with them.

About 70 to 80% of the finances of the public schools come directly from the Government, augmented by student fees. None of the private institutions receive financial aid from the Government; they depend on tuition and other school fees to finance their operation. Some sectarian schools receive grants from private organizations, missions or private individuals.

Public elementary education (primary and intermediate) is supported entirely by the national Government, except that the municipalities provide the school sites. The general public secondary schools are maintained by provincial, city or municipal governments; but some are only partly supported by the local governments, and some are practically self-supporting, that is, they depend entirely on tuition fees paid by the students.

The yearly appropriation for public education constitutes almost one-third of the total national revenue. Parent-teacher associations and other local civic organizations give

contributions to the public schools, either in cash or in kind, such as books, desks, blackboards, equipment, supplies, as well as buildings and labour.

Types, levels and duration. There are 290 institutions for primary teacher training (9 of which are normal schools and teachers' colleges), and 333 institutions for secondary teacher training, of which 259 offer, in addition to secondary teacher training, primary teacher training as well. All of these are departments of private universities or colleges except the 9 government normal schools and teacher training colleges.

Arts and trade schools and colleges provide training for industrial arts and practical arts teachers, and for trade and industrial school teachers. The degree of Bachelor of Science in Industrial Education is awarded to graduates of a four-year course. Institutions for primary teacher training award a B.S.E.Ed. degree and those for secondary teacher training confer the degree of B.S. in Education at the end of four years of training. Bachelor of Science in Industrial Agriculture, Bachelor of Science in Commercial Education, Bachelor of Science in Music are other degrees awarded by the different professional schools. A "revamp committee" in the Board of National Education proposed a fifth year programme in education where graduates of the A.B. or B.S. may be admitted to teacher training institutions for a period of one year to qualify them for teaching in the high school, but this recommendation has not so far been given effect to.

Some of the teacher training colleges and universities provide also a one to two years' post-graduate course for teachers leading to a degree such as Master of Education, Master of Arts, Master of Arts in Teaching and Master of Science. These colleges accept only holders of a bachelor's degree with an average grade of 2 in college. A qualifying examination appraises the candidate's ability to pursue thesis work which is a requirement for the degree. Courses leading to the doctorate degree in education or the doctorate degree in philosophy are offered by the universities.

Admission and enrolment. Government institutions for primary teacher training use the final grade and rank in the

secondary school examinations as well as a certificate of good character as criteria for admission. These are completed by an interview, and physical / medical examination. An admission test which includes general ability test and intelligence test is given by some admitting institutions. Generally speaking, the written entrance test is a composite test of competence in English and Tagalog, of general knowledge in history, geography, civics, mathematics, and science, of general intelligence, and of teaching aptitude. The duration of the test is about $3\frac{1}{2}$ hours. The physical or medical examination is conducted at the normal school or at a government hospital or clinic before the interview and entrance examination by the normal school physician or a physician in government service. Admission of students into private institutions for primary teacher training is also on the basis of the final grade in secondary school (student should belong to the upper 50% of the graduating class). An interview is also held to appraise the applicants' facility of expression and personality.

Admission in the private institutions for secondary teacher training is not governed by any of the criteria used in the selection for primary teacher training, although some institutions give an entrance examination involving general ability.

There is no age requirement for admission to any type of institution. A candidate for any of the teacher training institutions should have at least 10 years of previous schooling (6 years primary, 4 years secondary). The number enrolled and those who graduated in 1966-67 and 1967-68 (for which information is available) are shown in Table 1. The supply of teachers at present to meet the country's need is adequate in terms of the total output, but there is considerable shortage in certain subject areas, notably science and mathematics and a "surplus" in others, such as social studies.

Table 1. Number of enrolled and graduating students (government and private institutions)

Type of teacher training		1966-67			1967-68		
		Male	Female	Total	Male	Female	Total
Primary teacher training	enrolled	31 635	102 682	134 317	25 331	104 337	129 668
	graduated	3 862	18 685	22 547	6 221	23 799	30 020
Secondary teacher training	enrolled	12 879	40 000	52 879	13 971	45 669	59 640
	graduated	4 169	11 023	15 192	1 534	4 284	5 818

Student aid. Government institutions for primary teacher training give scholarship, free tuition and other fee concessions which cover about 1 to 3% of the student population. Some students of private teacher training institutions are also given financial assistance. Valedictorians enjoy full tuition scholarship, and salutatorians and honour students enjoy half and partial scholarships respectively for the first year. If they maintain required ratings, scholarships may be provided by the institution or private agencies.

Organization of instruction. Out of the institutions for primary teacher training, 226 have an enrolment of less than 300; 16 have 300-500 enrolment; 26 have 501-1,000 enrolment; 13 have 1,001-2,000 enrolment; six have 2,001-3,000 enrolment; and three institutions have more than 3,000 enrolment. Among the institutions for secondary teacher training, 300 have less than 300 enrolment; 10 have 300-500 enrolment; four have 2,001-3,000 enrolment; and only one has more than 3,000 enrolment. The size of private institutions is determined by (a) location of the college, (b) prestige of the college in terms of quality of education and adequacy of facilities, and (c) the courses offered. In the regional normal schools/teachers' colleges under the Bureau of Public Schools, enrolment is limited to between 1,000 and 2,000 students per school/college.

The class size in institutions for primary teacher training ranges between 25 and 50 and in the institutions for secondary teacher training between 30 and 50. In general, in education courses in which students from different departments enrol, the class size is usually big. In the State teachers' colleges and regional normal schools an ideal class size is supposed to be less than 40. The teacher-student ratio in private institutions for primary and secondary teacher training ranges between 1:25 and 1:45. In the regional normal schools and teachers' colleges, the ratio ranges between 1:27 and 1:32.

The teaching load in private institutions ranges between 15 to 25 hours a week, and is 18 hours in government institutions. Faculty members of private institutions with administrative and/or supervisory duties have a teaching load of only 6 to 12 hours a week, and in the government institutions about 9 hours per week.

Private teachers' colleges and education departments in the universities are organized into departments, namely English, Pilipino, Spanish, Social Science, Mathematics, Home Economics, Science, Psychology, Physical Education, and Guidance and Counselling. Regional normal schools

and teachers' colleges are also organized into academic departments, namely, Department of Languages, Mathematics and Science Department, Professional Education Department, and Arts and Physical Education Department.

Curriculum. Till 1970 there were slight differences in the subjects of the curriculum of teacher training followed in the public and private institutions. With the issuance of Department Order No. 8, s. 1970 entitled, "The Revised Teacher Education Programme", all teacher training institutions, both public and private offering the four-year curriculum leading to the B.S.E.E. and B.S.E. degrees, follow the same course offerings that would satisfy the total requirement of 156 units.

In the B.S.E.E. curriculum, 102 units are allotted to general education, 26 to professional education, and 18 to the "concentration courses" on any of the following areas - language teaching, science and mathematics, social science, arts, health and physical education, administration and supervision, special education, and early childhood education; while in the B.S.E. curriculum, 93 units are given to general education, 30 to professional education, and 33 to specialization courses (majors and minors) in any of the following areas - Pilipino, English, Spanish, and other disciplines.

The breakdown of the general courses in the B.S.E.E. curriculum is as follows: English - 15 units, Pilipino - 12 units, Spanish - 12 units, social sciences - 15 units, natural sciences - 11 units, music and arts - 9 units, mathematics - 6 units, health - 6 units, practical arts and home economics - 6 units, philosophy - 3 units, Rizal - 3 units, and physical education - 4 units. The professional education courses include introduction to education - 3 units, child adolescent development and learning - 6 units, educational research and evaluation - 3 units, guidance - 3 units, methodology - 9 units, student teaching - 9 units, and electives - 3 units.

Student teaching. All institutions for primary and secondary teacher training, both private and government, have their own practising schools. Students of private teacher training institutions observe and participate for one semester in the third year and practise to teach for a semester in the second

semester of the fourth year. This also includes six weeks' teaching on-campus and eight weeks' evaluation or post-off-campus work.

The student teaching programme in the government institutions for primary teacher training includes two weeks' orientation, eight weeks' practice teaching on campus, eight weeks' practice teaching in co-operating schools, and two weeks of evaluation seminar. In some of the institutions for primary teacher training, practice teaching or on-campus teaching is also given for one semester from off-campus teaching.

Student teaching in the Philippines is divided into four phases. During the first phase called "orientation", the student receives pointers and guidance from the supervisor of student teaching in the laboratory school. In the second phase, the student undertakes on-campus teaching. In the third phase, the student-teacher on off-campus teaching discharges all responsibilities of the teacher under the guidance of a co-operating teacher with such additional supervision as may be given by the district supervisor and the supervisor of student teaching. In the fourth phase, the student-teacher returns to work in the laboratory school for evaluation and for removal of difficulties, with the aid of individual and group conferences with the teacher training instructors and the supervisor of student teaching.

In the institutions for primary teacher training, student-teachers are required to do some research and prepare resource materials from magazines, periodicals and reference books, help children in all their co-curricular and recreation activities, make a case study of a child, observe the behaviour of children and maintain individual behaviour profiles and anecdotal records, participate in all activities of the staff of the co-operating school, and participate in community education programmes.

Evaluation. Evaluation of the student-teacher in theory subjects is done as a continuing process through assignments, term papers and periodic tests given by the instructors. Semestral examinations are also set and rated internally on a five-point scale in which the student has to get a score of 3 in order to pass.

In the off-campus student teaching programme, rating is the result of a combined judgment of the college supervisor and the co-operating teacher. Ratings are based on observations (written and unwritten) of the performance of the student-teacher in and out of the class. Every co-operating teacher would complete a minimum of 8 observation and analysis forms during the semester for every student-teacher under his or her charge and submit mid-term and final grades. Rating scales are developed by individual colleges for guidance.

Teacher educators

An instructor in an institution for primary and/or secondary teacher training should be at least a bachelor's degree holder if he is to teach a major field of junior college subjects, and be at least a holder of a post-graduate degree if he is to teach in a major field of senior college subjects.

The State universities or colleges have a President, Vice-President, Dean of Instruction and some other Deans, Heads of Departments and Chairmen of different units who may also be professors or assistant professors. Instructional staff includes lecturers and instructors. Teaching work is mainly done by those who do not hold administrative posts, although some of them may handle some higher courses. Student teaching is usually organized by the Director of Student Teaching, who is normally the head of the Laboratory School, and supervised by methods professors. The organization may vary slightly among the State colleges, as well as in private universities and colleges.

In-service education

The Department of Education, through the Bureau of Public Schools, organizes programmes of in-service education at the national level which are "echoed" or repeated at the regional, division and local levels through the instrumentality of division and local authorities. There are some 20 regional in-service training centres in different parts of the country which organize institutes or conferences once or twice a year for the benefit of primary education supervisors and principals of pilot schools.

Other governmental agencies that collaborate in the organization of in-service training programmes for elementary school teachers are: (a) the National Economic Council which has organized a number of regional in-service training centres and pilot schools; (b) the National Science Development Board which sponsors programmes for the improvement of science teaching; (c) the Philippine Centre for Language Study which seeks to promote a better understanding of Philippine languages and also conducts courses on second language teaching; (d) the National Co-ordinating Centre for the Study and Development of Filipino Children and Youth.

Private institutions for primary and secondary teacher training conduct in-service education in the form of seminar workshops for one or two weeks (during summer or Christmas vacations) and summer courses for six weeks. Government institutions also conduct regular summer courses for six weeks as in-service education. In-service training programmes organized by the institutions for primary teacher training are: (a) work conferences (for teacher education) lasting one to two weeks, held once a year; (b) seminars (national, regional, local) varying from one to three weeks; (c) vacation courses, six to eight weeks, conducted once a year; (d) conferences; (e) monthly study circles for a few hours; and (f) occasional lectures, exchanges of experiences, and demonstrations of teaching, for a couple of hours. To encourage teachers to continue their professional education, incentives are provided; the credits gained through these courses are counted towards increase in salary and promotion in rank. Certificates of attendance or proficiency are awarded to teachers and other education personnel depending upon the nature of the training given. For purposes of promotion, it is generally necessary that the type of training should be in accordance with the new position applied for.

Research

Research is undertaken in the government teacher training institutions either as individual studies by instructors/professors, or co-operative studies by a research department. Individual and co-operative studies are undertaken in private institutions also, and these may sometimes be in collaboration with government agencies. To foster research in government and private teacher training institutions, a researcher is given time release and the institution undertakes the publication of the study. Private institutions sometimes give extra compensation also to the researchers. To a limited extent, some government agencies and external foundations support researches in connection with teacher education in private institutions.

SINGAPORE

Education system

Present structure and organization. The education system consists of pre-school which is optional for the age-group 4 and 5; primary 1 to 6, for the age-group 6 to 11; secondary of four years' duration, for the age-group 12 to 15; and two years' pre-university classes or technical education; and generally three or four years at the university for a first degree.

Teacher education

There was little machinery for training teachers of English schools throughout the 19th century. A system of employing pupil teachers was followed until, in 1878, a College for training Malay school teachers was opened. Later trainees were sent to a newly opened college in Malaya. Normal classes were started in 1906 for the training of both primary and post-primary teachers and these continued till 1960. The training lasted for three years and it was in-service in nature. A post-graduate course (for Diploma in Education) was instituted at Raffles College which was established in 1928.

A teachers' training college was opened in 1950. It offered a two-year full-time course leading to the Certificate in Education (for primary teachers). The newly established University of Malaya (later to be called University of Singapore) offer Diploma in Education courses for graduates intending to become teachers. The part-time normal classes also continued until, in 1960, a single system of training for primary teachers was introduced. This was a part-time three-year course leading to the Certificate in Education. The normal

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Text based on response to the Institute's questionnaire through the courtesy of the Ministry of Education (Singapore) supplemented by information from other documents.

classes and the full-time certificate courses were now abolished. But in 1966 the full-time certificate course (two years) was again instituted. The part-time three-year certificate course is being phased out and disappeared completely in April 1971.

Management, control and financing. Responsibility for education rests with the Minister of Education who is assisted by a Permanent Secretary and a Parliamentary Secretary. The Permanent Secretary is also the Director of Education.

The Teachers' Training College is directly under the control of the Ministry of Education. All courses, course-structure, syllabuses, examination schemes and other professional matters have to be approved by the Director of Education before implementation. All members of the staff of the Teachers' Training College are civil servants and have to conform to all the rules and regulations pertaining to the service. The Teachers' Training College is fully maintained from Government funds.

The officers of the School of Education are appointed by the University, which is an autonomous institution, but supported by the Government. They are not bound by the Civil Service regulations. College fees are a source of income.

Types, levels and duration. The Teachers' Training College is the only institution for teacher training at all levels in Singapore, except kindergarten. The College serves the whole of Singapore.

There is no special institution for the training of kindergarten teachers, but the Ministry of Education and the Adult Education Board periodically run ad hoc courses for such teachers. From 1966 the Teachers' College offered a full-time General Certificate course of two years for primary teachers. In May 1970, a new full-time (two-year) training course for candidates with the full Higher School Certificate was started in the Teachers' Training College. These students will eventually teach in the lower forms of the secondary schools.

The College now conducts full-time courses for technical teachers and music teachers, and full-time and part-time courses for home economics teachers. The duration of the full-time courses is two years.

In 1969, the Diploma in Education course for graduate teachers of secondary schools (English and Chinese media) also became the responsibility of the Teachers' Training College which undertook this function in conjunction with the School of Education, University of Singapore. The School of Education, thereafter, confines itself to courses at the M. Ed. level. The Diploma course is of one year's duration.

In order to meet the many emerging needs for different types of teacher training, the College has at present 14 types of courses. They are:

No.	Course leading to	Entrance qualifications	Language media	Duration of course
1.	Certificate in Education (General)	School Certificate	English/Chinese/ Tamil/Malay	three-year part-time
2.	Certificate in Education (General)	School Certificate	English/Chinese	two-year full-time
3.	Certificate in Education	Higher School Certificate	English	two-year full-time
4.	Certificate in Education (Domestic Science)	School Certificate	English/Chinese/ Malay (Bilingual)	one-year full-time and two-year part-time
5.	Certificate in Education (Technical)	School Certificate	English/Chinese/ Malay (Bilingual)	one-year full-time and two-year part-time
6.	Certificate in Education (Technical)	School Certificate	English/Chinese	two-year full-time
7.	Certificate for Craft Teachers	School Certificate	English/Chinese	three-year (one-year full-time; two-years in plant)
8.	Certificate in Education (H.S.C. Holders)	Higher School Certificate	English/Chinese	two-year part-time
9.	Diploma in Education (University Graduates)	University Degree	English/Chinese	one-year full-time
10.	Certificate in Education (University Graduates)	University Degree	English	two-year part-time

No.	Course leading to	Entrance qualifications	Language media	Duration of course
11.	Certificate in Education (University Graduates)	University Degree	Chinese	three-year part-time
12.	Certificate in Education (Home Economics)	Ngee Ann College Diploma	Chinese	two-year part-time (special course)
13.	National Language course, Standard I, for qualified teachers			
14.	Special in-service courses for selected experienced teachers.			

N.B. : It is planned to have full-time for all primary teachers in 1971; also to institute a B. Ed. degree programme with university collaboration.

Admission and enrolment

Admission requirements for the Certificate in Education:

i) General (Primary) - Grade I or Grade II Cambridge School Certificate or Grade I or Grade II Government Secondary (four-year) School Certificate or equivalent certificate with credits in language of instruction and two other subjects (one of which must be a mathematics or science subject). Note: The Cambridge School Certificate or Government Secondary (four-year) Examination is taken after 6 years of primary and four years of secondary education.

ii) Lower Secondary (H.S.C. Holders) - The Cambridge Higher School Certificate (English) or the Government Higher School Certificate (Chinese and Malay).

The H.S.C. examination is taken after 6 years of secondary education.

iii) Technical, Commercial and Home Economics (Secondary) - Candidates must possess a Cambridge School Certificate with credits in the medium of instruction and relevant subjects.

Criteria used for admission in the primary teacher training programme, apart from the final grade in school certificate, are a certificate of good character (testimonial) from the principal of secondary school, and an interview which considers aptitude and attitude, personality, sense of vocation, speech and appearance. An admission test (reading and comprehension test) is given only to those who apply for full-time training. In addition, applicants must be certified medically fit by the government medical officer.

iv) Admission requirements for the Diploma in Education - Candidates are selected on the basis of academic qualifications (a degree from a recognized university). Participation in extra-curricular activities is given weight. An interview is held. All successful candidates must pass a medical examination.

The number of students enrolled in 1967-1969 and the number graduated in 1967 are given in Table 1. The present supply of teachers meets the country's needs, except in the case of science subjects.

Table 1. Number of students enrolled in 1967, 1968 and 1969 and graduated in 1967

Type of teacher training institutions	Number of students enrolled						No. graduated	
	1967		1968		1969		1967	
	Female	Total	Female	Total	Female	Total	Female	Total
Primary teacher training	2 107	3 153	1 283	1 861	966	1 338	777	1 228
Lower secondary teacher training	398	790	257	443	70	130	240	616
Graduate courses	125	277	128	206	202	329	-	-

Note: The table does not include enrolment in secondary domestic science, secondary technical, secondary commercial and secondary craft courses.

Student aid. Selected full-time students (in primary teacher training) who are in need of financial aid receive bursaries to the extent of $600 a year. About 10% of the full-time students may get remission of fees. Bursaries are also available to students taking the Diploma in Education course.

A few scholarships awarded by outside bodies are available. Government bursary holders have to sign a bond to serve the government for three years after qualifying. No other assistance is provided in the Teachers' Training College.

Facilities. The facilities are adequate and are being improved. Recently, this college has been equipped with one language laboratory, a new library, an auditorium, science block (with fully equipped laboratories for physics, chemistry and biology) technical block, gymnasium and sports fields. It has also an audio-visual lecture room, studios, and a photographic processing laboratory, art and crafts studios, and a music lecture room and practice rooms. The

technical workshops are well fitted for woodwork and metal-work. The home economics laboratories provide for home-craft, cookery, dressmaking, etc. For the use of students there are a canteen and students' common rooms. Staff common rooms, rooms for lectures and exhibitions, a bookshop, a botanical garden and a miniature zoo are among other facilities.

The number of lecture rooms is considered inadequate at present because of the increased intake of full-time students at primary/secondary levels.

Organization of instruction. The University of Singapore School of Education is solely responsible only for the M. Ed. degree. The enrolment at the Teachers' Training College is over 4,000, covering a variety of programmes such as the training of primary and secondary general, technical and home economics teachers, each in the English, Chinese, Malay and Tamil media, as well as the in-service training of qualified teachers.

The average class size in the Teachers' Training College is 30. Class size has been based on the number of the staff available. Teacher-student ratio is approximately 1:28. Lectures, lecture-cum-discussions, tutorials, films, seminars, library assignments, visits and closed circuit television, are the usual methods followed in teaching.

A minimum of 22 hours' lecturing and supervision is considered a full load for the Training College staff. The teaching load of faculty members with administrative duties is 6 hours a week and of those with supervisory responsibilities is 12 hours a week. The College is organized into the following departments: Art and Crafts, Audio-Visual Education, Chinese Studies, Commerce, Home Economics, Education (Chinese), Education (English), English Studies, Mathematics, Music, Physical Education, Science, Special Courses, Tamil Studies and Technical.

Curriculum. The curriculum for the primary teacher training programme in the Teachers' Training College includes (a) professional education - principles of education (including educational psychology), methods of teaching language, teaching of second language, teaching of science, educational

psychology (elective), physical education, speech training, audio-visual aids, arts and crafts, etc. ; (b) general education - language, literature, second language, content study, civics and government.

For the lower secondary teacher training programme, the curriculum is made up of: (a) professional education - theory of education, history of education, educational psychology, comparative education, general methods, methods of teaching language, special methods, physical education, art and crafts, audio-visual aids, speech teaching, etc. ; and (b) general education and government.

The College requires the following professional education courses in the upper secondary teacher training programme, specifically for the Diploma in Education course, as part of the total requirements: education in Singapore and Malaysia, theory of education, history of education, psychology of education, general methods, special methods and health education, optional subjects, practice teaching, speech training and tutorials.

Student teaching. There are no laboratory schools in Singapore, but the trainees in the part-time training scheme teach in schools during one session and attend lectures at the College during the other session. The students undergoing full-time training are attached to schools for practice teaching for 10 weeks each year. They are sent to Government and Government-aided schools, an average of four students per school. Schools are directed by Government to accept students sent to them. Students go directly to schools during teaching practice sessions for no transport or other allowances are provided. Besides teaching practice, students are expected to prepare teaching materials of various kinds. They must participate in self-chosen extra-curricular activities.

Lecturers from the Teachers' Training College supervise teaching and assist as well as assess. Principals and teachers of schools help and advise students in their work, but do not assess or submit reports. Normally each student is supervised by two lecturers in turn.

Evaluation. Examinations are held at the end of each year of a course. These are internal examinations held by the

College. For the final examination of each course there is a panel of external examiners from the local university or outside universities. The examinations are written or practical, depending on the nature of the subject. There are no external examinations.

In practice teaching a minimum of three to six reports, with marks, are submitted for each full-time student by the lecturers of the college for each block teaching practice. These form the basis of evaluation for the year.

Teacher educators

Qualifications required for each post in the Teachers' Training College are given below:

For posts of Assistant Lecturer and Lecturer - minimum qualification is Training College Certificate and special training in some connected subject areas; or university degree and Diploma in Education or Certificate in Education.

For Senior Lecturer and above:

1) University degree and Diploma in Education or Certificate in Education;

2) Specialist qualification (e.g. Diploma in Art or P.E.) and Certificate in Education.

It is expected that holders of the posts of Principal and Vice-Principal have higher degrees.

To improve the preparation of teacher educators, advanced training schemes and overseas scholarships have been made available to deserving members of the lecturing staff. Almost every year some lecturers are sent abroad for advanced or special training.

Basically, a teacher educator in the Teachers' Training College should have a good first degree, professional training and teaching experience. For the School of Education, every teacher educator should have a degree in education, relevant to the subjects taught.

Staff gradations and duties. The staff gradations are as follows:

Principal, Vice-Principal, Head of Division, Head of Department (Senior Lecturer), Lecturer, Assistant Lecturer. In the Technical Department (Secondary Section) there is also the lower post of Instructor. In the School of Education there is only a Reader. All do teaching, but supervision of practice teaching is done mostly by the lecturers.

In-service education

The Teachers' Training College is the main agency for running in-service courses. Occasionally, courses may also be held at the University or the Ministry of Education.

Courses conducted for qualified teachers are mainly on the latest trends in theory, methods, administration, etc. and also in content areas. They are designed to upgrade the teachers and improve the quality of their work. They take the form of lectures, discussion sessions, workshops, seminars and conferences.

A certificate of attendance is given to each participant who attends the prescribed number of hours. The courses are usually of 30 hours' duration. No allowances of any sort are given, but for some courses incremental credits may be given to successful candidates.

There are special courses for school principals and specialist teachers.

The in-service courses conducted by the Teachers' Training College are listed below:

Types of in-service course	Duration of hours
1. Teaching of biological science for graduate teachers	90
2. Woodwork and metalwork for trained technical teachers	90
3. Teaching of English as a second language	90

Types of in-service course	Duration of hours
4. Teaching of Chinese as a second language	90
5. Youth leadership for primary and secondary school teachers	90
6. Teaching of science and mathematics for Malay secondary school teachers	90
7. Teaching of primary school and lower secondary school science	90
8. Advanced teacher education	90
9. Teaching of art and craft in secondary schools	90
10. Special refresher course in physics for graduate teachers	45
11. Health education for primary teachers	35
12. Refresher course in primary school mathematics	30
13. Vocational guidance for secondary school career masters	30
14. Refresher course in teaching of secondary school mathematics	30
15. Refresher course in teaching of secondary school biology	30
16. Refresher course in teaching of secondary school chemistry	30
17. Refresher course in teaching of secondary school physics	30
18. Political studies	45
19. School librarianship course for qualified teachers	45
20. Teaching of Tamil language and literature	30
21. Teaching of domestic science for qualified teachers	90
22. Teaching of English literature for non-graduate teachers in secondary schools	90
23. Teaching of mathematics for Chinese university graduate teachers in Chinese secondary schools	90
24. Teaching of pottery for qualified teachers in vocational schools	90
25. School music course for teachers in Chinese schools	150
26. Upgrading course for Muslim religious teachers	540

Types of in-service course	Duration of hours
27. SITC/MWTC upgrading course for Malay teachers	480

Note: The above courses have been organized on an ad hoc basis. Some of them are repeated when the need arises.

Research

There is a research unit in the Teachers' Training College manned by voluntary members of the College on a part-time basis. They get time off for research work. The research work undertaken represents a modest beginning in the field of research in teacher education and in school problems.

Despite the lack of trained persons, considerable interest has been generated among the staff, some of whom have participated in the studies completed so far.

Currently, the College is undergoing reorganization and a scheme is being drawn up for the training of staff to post-graduate levels in the various disciplines. It is hoped that the whole staff of the college will be made more adequate and knowledgeable about research methods through training and thus help to improve the quality of research.

The policy of the administration does not regard research as a separate activity but as an integral part of the college programme in which teaching and research are one. Students will also participate in directed studies and projects as part of the requirements of the reorganized programme. The research unit will no longer continue as a separate entity. Evaluation studies on such aspects as the relevance and quality of college courses, student response to the programme or on the relevance of the college programme to needs will become increasingly the responsibility of an evaluation unit to be based in the administrative section.

Survey of teacher education

A small research unit was set up in the Ministry of Education in mid-1969. This unit is engaged in the following aspects of research:

a) evaluation studies connected with the implementation of new educational policies;

b) curriculum development and associated evaluation studies;

c) second language research;

d) test development and test adaptation;

e) development of programmed instruction and the associated validation studies of product;

f) manpower studies related to the development of technical education.

In September 1970, the research unit was enlarged to include the statistics unit. Routine statistical data and analysis of statistical information are now the responsibility of this section.

THAILAND

Education system

Present structure and organization. The present structure of the education system derives from the National Scheme of Education of 1960 which introduced many fundamental changes in education in Thailand.

The following is the pattern of education set forth in the Scheme and implemented:

1. Pre-school education in kindergarten schools consisting of two or three grades; or pre-primary education organized in elementary schools for the length of one year.

2. Elementary education (Pratom) to be given in schools with both or either of the junior grades (I-IV) and senior grades (V-VII). All children above 7 years of age, unless exempted for valid reasons, are required to attend school until the age of 15 or until they completed Pratom 4. Education is free in public schools. In 1961, an enabling provision was made for extending the period of compulsory education to Pratom 7 at the discretion of the Government, and in 1963 it was enforced in 399 sub-districts or Tambols. It has not been possible so far to extend compulsory education of seven years' duration to the whole country.

3. Secondary education (Mathayom Suksa or Maw Saw, abbreviated as M.S.) in schools with both or either of the junior and senior grades organized in two streams - the general stream which aims chiefly at general education, and the vocational stream which aims chiefly to give specific vocational and educational preparation and training.

Text based on response to the Institute's questionnaire through the courtesy of the Ministry of Education (Thailand) supplemented by information drawn from other documents.

In the general stream there are three lower secondary grades (VIII, IX, X) and two upper secondary or pre-university grades (XI and XII), on completion of which pupils may move to institutions of higher education. In the vocational stream, both at the lower and upper secondary levels, courses may be of one, two, or three years' duration depending on the character of the occupation. Senior vocational schools (grades VIII-X), higher vocational schools (grades XI-XIII), and technical institutes (grades XIV-XVI) are also organized to teach various vocational subjects at varying levels. The subjects include building trades, machine shop, auto-mechanics, electricity, radio, surveying, agriculture, tailoring, home economics, secretarial work, etc.

In the last few years, a new type of secondary school - comprehensive secondary school - is being developed, based on the principle of providing a range of options - academic, scientific and vocational/technical - in the same school. Starting as a pilot project with twenty comprehensive secondary schools, the scheme is being gradually expanded with suitable modifications.

Private schools play a considerable part in promoting education in Thailand. 10% of the primary, 36% of the upper primary and 45% of the secondary school enrolment were in private schools in 1969.

Higher education includes teacher education, technical institutes, and universities.

Teacher education

The first teacher training school was set up in 1892 when the Department of Education was enlarged to become the Ministry of Education. Since then many more training schools were established and developed under the Ministry, and a variety of training programmes offered for primary teacher training. The Prasarnmitr Training School was established in 1949 and four years later became the College of Education. The college first offered a four-year course leading to a Bachelor's Degree in Education. In 1916 Chulalongkorn University organized a course for Diploma in Education which was later extended to a degree programme at its Faculty of Education.

In 1956 the Thailand-Unesco Rural Teacher Education Project (TURTEP) was established at Ubol in order to train teachers for rural areas. In addition to teacher training, the Ubol Training College offered a course in community development, in which students had to do their teaching practice in village schools. Some of the training programmes set up for primary teacher training were abolished in the 1950s.

There are three major parallel tracks to becoming a teacher, namely, through teacher training institutions, "twilight" courses, and external certification.

1. Regular track: There are four levels of teacher certification through institutional training in Thailand. These are: The Certificate in Education (Paw Kaw Saw - three years of high school plus two years of teacher training); the Higher Certificate in Education (Paw Kaw Saw Sung - Paw Kaw Saw plus two years of teacher training, or completion of five years of high school plus two years of teacher training); degree level (B.Ed., B.A., B.Sc.); and graduate level (Advanced Diploma in Special Fields, M.Ed., projected Ph.D. programme). The fields of fine arts, physical and health education, and vocational education follow similar patterns of certification.

2. Alternative certification track: In addition to the certification gained through attendance at one of the teacher training institutions, there are at least two parallel tracks to teacher certification. The first of the tracks is referred to as the "twilight programme" which provides teacher training instruction at all levels after the normal daylight hours. It is possible for a "twilight" student to pass through all three levels of teacher certification (including B.Ed.) in evening courses. Twilight courses were first established at the College of Education in 1955 for teachers already in service, and have now been firmly established and their popularity has grown enormously. Twilight programmes at some branches of the College of Education and at several teacher training schools now exceed the daytime enrolment. Chulalongkorn University also admits a sizeable number of twilight students in B.Ed. and M.Ed. programmes. In 1970, a total of 32,202 students was registered in twilight teacher training programmes.

3. External certification track: The Paw Maw (Diploma in Education) is the first external certification. The Paw Maw may be earned by in-service teachers solely through examination in professional education course and in their choice of three elective academic areas. The Paw Kaw Saw (Certificate of Education) may also be earned through external examination. There are many applicants for this examination, but the rate of passing for general subjects (education, Thai, English, mathematics, science, and social studies) averages less than 20%. The rate for special subjects is somewhat higher, at about 50%.

The intermediary levels of certification came into existence as a special measure to meet a specific emergency in teacher supply and most of these levels are now used by a prospective teacher as "remedial" certification.

Management, control and financing. The responsibility for administration of education in Thailand is divided among the Office of the Prime Minister, the Ministry of Education and the Ministry of Interior. Within the Office of the Prime Minister are the National Education Council which is entrusted with the overall planning function and the University Development Commission which co-ordinates university education. The Ministry of Education shares with the Ministry of Interior the administration of education below university level. Since 1966 the administrative responsibility for rural elementary schools is thus transferred to the Division of Elementary Education of the Department of Local Administration, Ministry of Interior. The Ministry of Education is responsible for teacher training, curriculum development, textbook production for these schools and supervision of instruction. The elementary "model" or "experimental" schools are also under the Department of Elementary and Adult Education of the Ministry of Education. Some of the other Departments of the Ministry of Education are the Department of Secondary Education, the Department of Vocational Education, the Department of Educational Techniques, and the Department of Teacher Training. The Department of Teacher Training is responsible for all teacher training colleges and the College of Education, Prasarnmitr; but the Education Faculties of the Universities are under the jurisdiction of the Office of the Prime Minister.

The country is divided into 12 educational regions, each with a regional education officer, who is in charge of supervision and in-service training of teachers which he does through supervisors of elementary and secondary schools. For supervision of all levels of education in the provinces, each province (Changwat) has a provincial education officer with some supervisors under him; similarly for each district (Amphoe) there is a district education officer. These officers function under the Ministry of Education.

Schools are of four categories: local, municipal, government and private. Private schools hold an important place in Thai education. These schools are under the overall supervision and control of the Minister of Education and must comply with the Private Schools Act. A yearly subsidy from the Government is paid to these institutions. Local and municipal schools which provide only primary education receive grants for teachers' salaries, equipment, and part of the cost of construction of new buildings. Government finances all primary, secondary and vocational schools. All teacher training institutions are also financed by the Government.

Types, levels and duration. Early in 1970, under the Ministry of Education there were four teacher training schools for training primary-level teachers (which are secondary-level normal schools), 21 teachers' colleges (institutions for primary and lower secondary training), and one College of Education with 6 branches, making a total of 32 institutions.

Of the four teacher training schools, two were in the Bangkok/Thonburi area and two south of Bangkok. These schools received students at the M.S. 3 level and provided a two-year course leading to the Paw Kaw Saw (Certificate in Education) qualification. The training programme was progressively oriented in the last fifteen years toward the preparation of rural primary school teachers. There were previously many more of these training schools, but they have been gradually converted into teacher training colleges for the task of preparing elementary school teachers so that their number has come down to four at the end of 1969. In 1971 the four training schools also became teachers' colleges training for both primary and lower secondary teachers, thus raising the number of teachers' colleges to 25.

Survey of teacher education

The teacher training colleges carry out a four-year training programmes leading, after two years, to the Paw Kaw Saw (Certificate in Education - for primary teaching) and after another two years to the Paw Kaw Saw Sung (Higher Certificate in Education - for lower secondary level teaching). All teacher training colleges have the same syllabus which is established by the Ministry of Education Department of Teacher Training.

Nine of these institutions are in the Bangkok / Thonburi area or adjacent provinces and the remaining are distributed throughout the country. Approximately two-thirds serve the rural areas.

The College of Education established at Prasarnmitr in 1954 is now a training and research institution at the higher education level granting B.Ed. and M.Ed. degrees. It operates under the Department of Teacher Training of the Ministry of Education. Its functions are: a) to prepare administrators, supervisors, and teachers for elementary, secondary, vocational, and teacher training institutions; b) to prepare instructional materials for use in schools; c) to conduct in-service training programmes for teachers, administrators, and supervisors; d) to conduct educational research. The six branches of the College are in different places - two in the Bangkok / Thonburi area and four in the provinces. The College of Physical Education has recently become a branch of the College.[1] The College of Education and its various branches conduct the following programme leading to certification: a four-year degree programme following completion of the Paw Kaw Saw (Certificate of Education) leading to the B.Ed. degree, a range of two-year programmes following completion of the Paw Kaw Saw Sung (Higher Certificate in Education), also leading to a B.Ed. in several fields, a post-graduate programme of one-year's duration leading to a certificate in certain specialized fields (not a degree), and a Master's degree programme in several fields. A doctoral programme is being planned at Prasarnmitr.

There are Faculties of Education at Chulalongkorn University, Chiangmai University, Prince of Songkhla University, and Khon Kaen University. The universities offer two-year and four-year courses leading to the B.Ed., the B.A. and the B.Sc. degrees.

1. This was after 1970. At present, the College has thus 7 branches.

Chulalongkorn University also offers a two-year programme leading to the M.Ed. degree and a special one-year graduate programme leading to a Graduate Diploma (non-degree) in several specialized subject fields.

Teacher training for agricultural education is carried out primarily at the Bang Pra Agricultural College. The institution prepares M.S. 6 graduates in two years to teach in agricultural schools with the Paw Maw Kaw (Diploma in Agricultural Education) qualification. Additionally there are seven agricultural schools training those who had completed M.S. 3, for teaching the elements of agriculture at the upper primary level. Vocational teacher training is carried out at the Bangkok Technical Institute and the Thewes Vocational Teachers' College. These admit graduates of upper vocational schools (M.S. 6) for three-year courses leading to the Higher Vocational Teaching Certificates for technical and industrial education. The Thonburi Technical Institute conducts a five-year course (of which the last two years are chiefly teacher training) leading to the Higher Diploma in Technology and Industrial Education. The Pranakorn branch of the College of Education conducts a two-year degree programme leading to the B.Ed. in Industrial Arts and Kasetsart University initiated in 1969 a similar degree programme for agricultural specialists.

Admission and enrolment. Students are admitted to the training colleges on the basis of examinations. The Ministry of Education makes regulations for these examinations. Procedures of admission to teacher training for the upper secondary level include also an interview for eliminating those with gross physical or psychological defects. Admission tests include an achievement test battery with tests in English, Thai, mathematics and science, and the College of Education Scholastic Aptitude Test (CESAT). A physical examination is also required. Applicants must be between 16 and 22 years of age. Quotas are fixed by the Ministry of Education for each college, and this is categorized according to province and sex. Children of teachers are given some concessions.

Table 1 shows the total enrolment in teacher training institutions, and the number of graduates for the years 1968, 1969 and 1970.

Table 1. Teacher education: enrolment and graduates
1968, 1969 and 1970
(not including teachers trained for vocational education)

	Enrolment			Graduates		
	1968	1969	1970	1968	1969	1970
Teachers' Colleges						
1. Paw Kaw Saw (Cert. in Ed.)						
Day	18 178	22 082	25 310	6 472	7 979	11 736
Twilight	-	6 667	18 670	-	-	-
Kindergarten	20	35	31	20	18	35
Library science	37	21	38	27	36	18
2. Paw Paw (Primary Teaching Cert.)	1 246	1 507	2 725	1 031	2 555	2 790
3. Paw Kaw Saw Sung (Higher Cert. in Ed.)						
Day	5 123	6 117	7 665	1 949	2 620	3 158
Twilight	894	3 993	7 195	-	-	-
College of Education						
1. Bachelor of Education						
Day	2 631	3 540	5 471	496 (35)[1]	684 (19)[1]	879 (36)[1]
Twilight	991	4 095	5 985	923 (213)[1]	1 084 (161)[1]	1 379 (206)[1]
2. Post-graduate Diploma	70	85	95	44	57	69
3. Master of Education	137	227	287	10	31	48
Faculties of Education						
1. Bachelor's Degree						
Day	1 087	1 670	2 104)	)	)	)
Twilight	270	322	352)	149 (12)[1])	219)	250*)

Table 1. Teacher education: enrolment and graduates 1968, 1969 and 1970 (cont'd)

	Enrolment			Graduates		
	1968	1969	1970	1968	1969	1970
Faculties of Education (cont'd)						
2. Post-graduate Diploma						
Day	92	77	88	63	68	60
Twilight	189	159	169			
3. Master's Degree	142	258	350	10*	20*	30*
External examination						
1. Paw Kaw Saw (Cert. in Ed.)	-	-	-	3 698	3 805	3 500*
2. Paw Paw (Primary Teaching Cert.)	-	-	-	3	1	-
3. Paw Kaw Saw Sung (Higher Cert. in Ed.)	-	-	-	3 884	6 364	6 000*

* estimate figures

1. Those receiving Undergraduate Diplomas

Facilities. All teacher training institutions are government institutions; so buildings, equipment and supplies are provided by the Government. Usually each institution has a library, a laboratory, audio-visual equipment, physical education and recreation equipment, and facilities for music, art and craft, agriculture, and home economics. However, some institutions are not provided with sufficient equipment and supplies because of the limited budget for education.

The greatest handicap however is the absence of suitable textbooks and professional reading material in the Thai language. This has necessitated lecturing by staff. Notes prepared and printed or mimeographed are widely used by students.

Organization of instruction. Enrolment in the teacher training schools varies from 300 to 1,800. Among the teachers' colleges for primary and lower secondary teacher training, many have an enrolment of

1,000-2,000 and at least one has more than 2,500. The average class-size (which has been determined on the basis of facilities, and the number of teachers in relation to the number of studies) in the teacher training schools ranges from 35 to 45 while in the colleges for primary and lower secondary, it is between 30 and 35. Teacher-student ratio in the primary and secondary teacher training varies between 1:10 to 1:13. Staff members such as directors or principals, administrative assistants, academic assistants, heads of divisions, librarians, registrar, and health officers do part-time lecturing. 15 hours a week is generally considered full teaching load for the teachers engaged in primary teacher training and 12 hours for those engaged in secondary teacher training. Teacher training institutions are organized into academic divisions: Thai Language, English Language, Mathematics, Science, Social Science, Education, Agriculture, Home Economics, Arts, Music, Handicrafts and Physical and Health Education.

Curriculum. The curriculum of teacher education is prescribed by the Ministry of Education, which also sets objectives, regulations and the required courses. For primary teaching (Paw Kaw Saw), 130 credits are required (one credit is equal to one hour per week for 12 weeks). The general courses and some of the special courses are identical to those offered in upper secondary schools and often the same texts are used.

Courses of study for Primary School Teaching Certificate

General courses (75 credits - all required courses)

Thai	15
English	20
Social studies	15
Mathematics	10
General science	15

Special courses (35 credits required from this list)

Agriculture	5
Home economics	5
Handicrafts	6
Physical education and health education	6

Courses of study for Primary School Teaching Certificate (cont'd)

Special courses (35 credits required from this list)

Music and Thai dancing	4
Art	5
Boy Scouts and Junior Red Cross	2
Library science	2

Education courses (20 credits - all required courses)

Education and child development	15
Student teaching	5
(Total credits required	130)

The education courses include the following:

1. "Brief introduction to Thai education" (three credits)
2. "Child development" (two credits)
3. "Educational psychology" (three credits)
4. "General principles of teaching" (two credits)
5. "Methods of teaching Thai, English, mathematics, science, and social studies" (one credit of each)

Student teaching. The majority of the teacher training institutions do not have practice schools. Practice teaching is carried out in the final year, in the primary teachers' course. It is for one full quarter (three months).

The requirement for admission to student teaching for the two-year Certificate in Education course is completion of all method courses. In the case of secondary teachers, it is the completion of the required courses for the four-year B.Ed. The duration of student teaching for both the Certificate in Education and the B.Ed. is the same. There are two phases of the student teaching programme. In the first phase, which is called preparation and which generally lasts for about two weeks, student-teachers work with classroom teachers in order to familiarize themselves with the students and with classroom routine. During the second phase which lasts for 10 weeks, student-teachers engage in actual teaching under the supervision of classroom teachers and college supervisors. While in the two-year

course both phases take place in the second year, in the four-year course they occur in the fourth year. Those institutions which have laboratory schools organize observation and initial teaching practice in these schools, while others have to use off-campus schools for these activities. Nearly all student-teachers in the two-year course are sent out to rural areas for off-campus teaching and do rural work as part of it. Each student-teacher is required to observe four demonstration lessons during the entire student teaching programme.

Student-teachers prepare their own teaching materials and are encouraged to collect materials that would be helpful to them and their pupils. They study the various record forms that are used by teachers, help children in their games, participate in field trips and excursions of school children, supervise children before and after classes. In addition they administer tests and keep records of their pupils' progress, participate in the activities of the staff, help in the activities of school clubs, participate in the maintenance of cleanliness in the co-operating schools and in their beautification, and participate in village community programmes.

Evaluation. All examinations are internal. Term examinations and the final examinations for each course are set by a group of instructors in the institution. Assessment is continuous. Practice teaching is assessed by the co-ordinating teachers and moderated by the college supervisors, who will be visiting for overseeing the student-teachers' work.

Teacher educators

In the colleges for primary and lower secondary teacher training a bachelor's degree is the minimum qualification prescribed for recruitment as teacher educators. The long-term aim is to raise their academic status to that of master's degree and doctorate degree holders, and to organize the exchange of expert educators. The College of Education and the University Faculties of Education have many Masters and Doctors of Education on their staff.

Table 2 shows qualifications of the staff.

Table 2. Qualifications of the teacher training staff in 1969-1970

	Doctors	Masters	Graduate Diploma	Bachelors	Diploma or equiv.	Below Dipl. (PKS)	Totals
University (Faculties of Education)	10	99	8	158	7	-	282
College of Education	33	208	15	124	3	-	383
Teachers' Colleges	1	288	-	1 508	363	166	2 331
Supervisors	2	152	21	339	447	80	1 041
Grand total	46	747	44	2 129	825	246	4 037

In-service education

In-service education is regarded as a function of the teacher training institutions. A six-week in-service course in various subjects for elementary and secondary school teachers is given once a year. To encourage teachers to continue their education, higher professional status and higher salary grades are given to those who possess higher qualifications.

In addition to the Department of Elementary and Adult Education and the Department of Teacher Education, the College of Education, the universities and some of the teacher training institutions organize in-service training programmes for primary school teachers. Another government agency engaged in in-service education is the provincial education office. The rural teacher training programme, started in 1956 as the Thailand-Unesco Rural Teacher Education Project (TURTEP), has since achieved its objectives in improving the quality of teaching in rural areas through teachers' participation in programmes of practical teaching and in community development in remote areas.

Non-official organizations involved in in-service training activities are the Teachers' Council, the Education Society of Thailand and the Science Association.

The twilight courses and the courses for external certification also afford opportunities for the education of teachers in service. The twilight courses for teachers are run in the teachers' colleges and involve full summer-time courses.

Research

For the primary level, the teachers' colleges for primary and lower secondary teacher training conduct research in their research departments. Sometimes some students are involved in a research project as helpers during their free hours to collect data and information. In the same institutions, a researcher is provided with clerical help. Generally a few qualified researchers, most of whom have other time-consuming responsibilities in addition to their research activities, do co-operative research. One research institution of interest to educators is the Bangkok Institute for Child Study, affiliated with the College of Education at Prasarnmitr. The Research Department of the same College has sponsored some educational research and the Test Bureau in the College has made significant contributions to developing several standardized tests for school and college use. At Chulalongkorn University, the Faculty of Education, and particularly the Department of Educational Research, has sponsored research studies. The Lanna Thai Research Centre of Chiangmai University is carrying out research studies on Thai adolescents. Apart from the training institutions and universities, various government departments responsible for different aspects of education carry out research and conduct surveys which help educational researchers. A notable example is the Ministry of Education's Educational Planning Office which collects data, compiles annual statistical reports on education, and has carried out several large-scale studies. The Department of Elementary and Adult Education has also carried out some studies. The National Education Council has sponsored research studies and is broadening its research function in line with its designated planning function.

REPUBLIC OF VIET-NAM

Education system

Present structure and organization. As of 1970, the educational programme extends over 12 years from grade I to grade XII (primary and secondary education). Primary education forms one unit of five years' duration.

The Constitution of the Republic of Viet-Nam calls for compulsory and free education for children between 6 and 11 years of age. In 1970, 97% of the children of this age-group received some schooling. One-fourth of all elementary school pupils and half of the pupils at the secondary level attend private schools.

The technical and vocational education programme has undergone substantial expansion since independence. Secondary-level vocational training which combines general education and technical courses last five years and lead to a vocational certificate. Vocational training in agriculture is given at the schools of agriculture, forestry, and animal husbandary at Hue, Can Tho, Saigon, and a number of small centres. A three-year programme combines academic work with technical subjects and field practice in agriculture. Advanced vocational courses covering three years of study are given to holders of vocational certificates.

Technical education beyond the secondary level is offered at the School of Public Works, the School of Electrical Engineering and the National School of Industrial Engineering, all of which are part of the National Technical Centre in Phu Tho. Agricultural education at the university level is offered at the National College of Agriculture, Forestry and Animal Husbandry at Bao Loe. Specialized post-secondary training is offered at the

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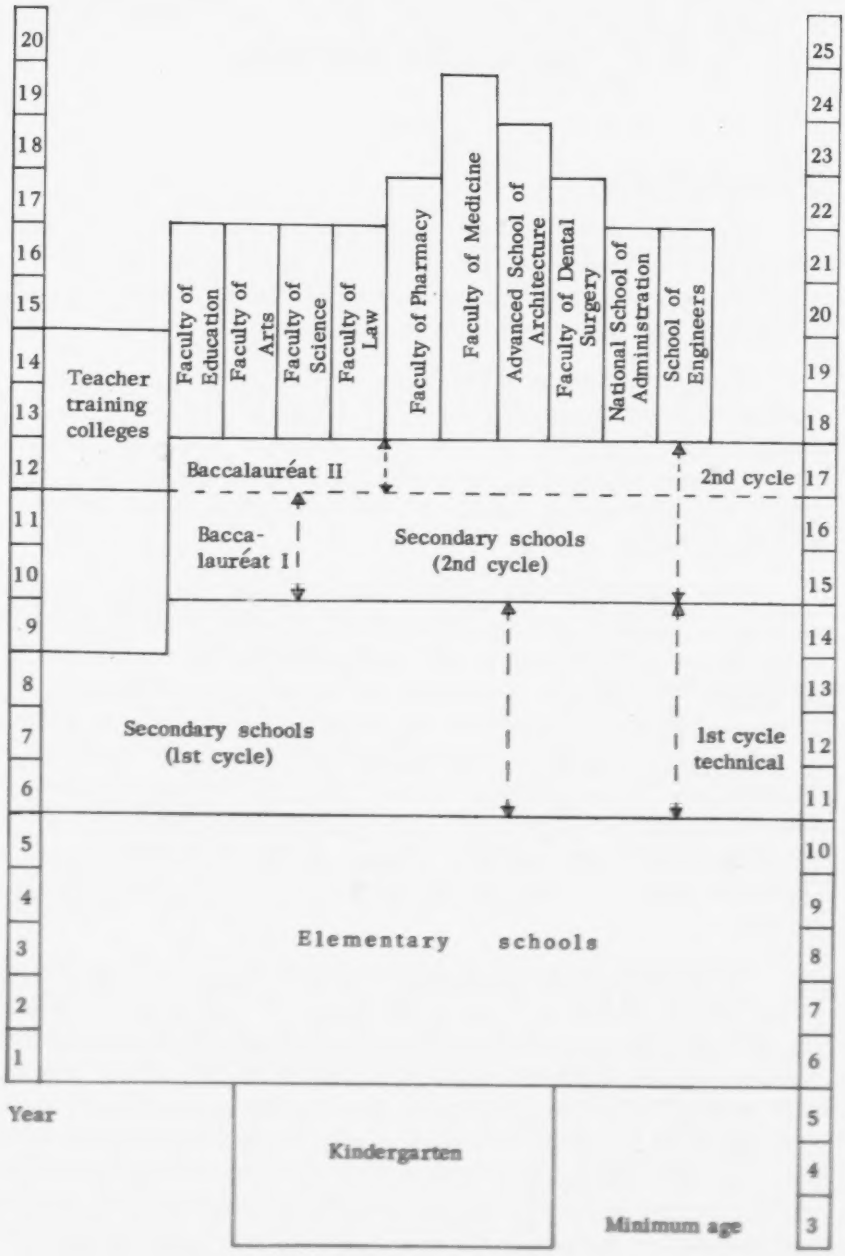
Text based on response to the Institute's questionnaire through the courtesy of the Ministry of Education (Republic of Viet-Nam) supplemented by Unesco and government documents.



STRUCTURE OF EDUCATION

National Institute of Administration in Saigon for prospective public officials in national and local governments. The three-year programme includes courses in public administration, law, economics and finance.

Higher learning is provided by five universities. The largest and most important is the University of Saigon. Enrolment at the university was about 30,000 in 1969, distributed among the Faculties of Jurisprudence, Letters (Literature, Language, History, Geography), Medicine, Advanced School of Architecture, Pharmacology, Education and Science.

Established in 1957, the University of Hue has four faculties: Jurisprudence, Letters, Sciences, and the Advanced School of Fine Arts. It had an enrolment of 5,000 in 1968. The University of Can Tho was established in late 1967.

The University of Dalat was established in 1957 by the Catholic bishops of Viet-Nam. Its faculties include Letters, Sciences, Education, Political Science, Business Administration and Journalism. The Buddhist Van Hanh University was established in Saigon in 1964. Devoted originally to higher studies in Buddhism, it is sponsored by the Unified Vietnamese Buddhist Church. In addition to the Faculty of Buddhist Studies, the University now has a Faculty of Letters and Human Sciences and a School of Social Work. Its enrolment is over 2,000.

Holders of a baccalauréat are admitted to most faculties of the universities without further examination. The duration of study in these institutions is generally four years, but varies according to the faculty. Examinations are given at the end of each academic year. Successful completion of the three-year or four-year programme earns a license (equivalent to a Bachelor's degree). The Doctorate requires three to four additional years of study.

Teacher education

In 1919, there were French normal schools for men and women in the cities of Hanoi, Hue and Saigon. The required admission level was the Certificat d'études primaires (Primary School Certificate) at the end of six years' schooling and the course lasted four years.

Survey of teacher education

Junior secondary school teachers were trained in the higher teacher training college of the University of Hanoi. The required level was the Diplôme de l'enseignement secondaire 1er cycle (Junior High School Diploma) (10 years' schooling) where the course lasted three years, the last year being spent in practice teaching and professional training.

There was, however, no normal school for the training of senior secondary school teachers.

After independence, in the years 1949-1950 and 1950-1951, emergency training courses for elementary teachers were opened. The required level was the Diplôme d'études primaires supérieures (10 years' schooling), and the duration of the course was one year.

The Ecole supérieure de pédagogie (Higher Normal College) in Hanoi trained teachers for the first cycle until civil war broke out. The level required was the second part of the Baccalauréat (12 years' schooling). The duration of the course was two years. There were four sections: science and mathematics, history and geography, foreign language (French or English), and Vietnamese literature.

For the training of secondary school teachers the universities of Saigon, Can Tho, Hue, Dalat and Van Hanh started a four-year programme. Nearly 2,000 students graduated from these institutions in the 1967-68 school year. In spite of the vigorous efforts made since independence, there is a shortage of secondary school teachers and this has been aggravated by the recent general mobilization law which drafted hundreds of teachers for military service.

Management, control and financing

a) The Directorate of Educational Affairs, In-Service Training and Adult Education is headed by a Director assisted by an administrative departmental head and an accountant.

The Directorate consists of a section of three supervisors chosen from experienced and qualified teachers of the 2nd cycle or the 1st cycle. This section supervises teacher training colleges, adult education courses and mass education courses with the concurrence of the Office of Studies. It

organizes examinations, entrance tests, and school-leaving tests, selects subjects for examinations, prepares lists of examiners and inspectors, and studies and proposes methods of improving and broadening primary teacher education. There are also four technical offices in this Directorate: Office of Administration and Accounts, Office of Educational Studies, Office of Teacher Training, and Office of Adult Education and Mass Education.

b) The Directorate of a teacher training school consists of the following personnel: a principal in charge of the general direction of the school; a vice-principal in charge of studies: schedules, semestral compositions, end-of-year examinations, and a general supervisor in charge of safety, health discipline, attendance, conduct of extra-curricular activities.

There are no private training institutions, except one teacher training centre run by a Catholic mission in Saigon. All public teacher training colleges are established in major cities and provincial centres.

The financing of the operation (personnel, equipment, facilities, etc.) of teacher training colleges and schools depends on the national budget. Education is free at all levels of studies.

Types, levels and duration

i) Faculté de pédagogie now renamed Dai Hoc Su Pham (Faculty of Education). There are, at present, two types:

a) For the teacher training course for secondary teachers of the first cycle, the required level was Baccalauréat, 2nd part, now called Tu Tai II. From 1963 the course lasted two years. Since 1965, the level required has been changed to Tu Tai II plus a Chung-Chi Du-bi Khoa-hoc va Van-Khoa (Preparatory Certificate in Science and in Letters) (13 years' schooling), and the duration of the course is 12 months. The certificate conferred is the Chung-chi Tot-Nghiep truong Dai Hoc Su-Pham ban De Nhat Cap (Certificate of graduation from the Faculty of Education, first cycle);

b) For the training course for secondary school teachers in the second cycle, the level required was Baccalauréat, 2nd part (12 years' schooling). Since 1965, the level required has been changed to Tu Tai II plus a Chung chai Du-bi Khoa va Van-Khoa (Preparatory Certificate in Science and in Letters) (13 years' schooling). The duration of the course is three years. There are sections: foreign language (French and English), Vietnamese, mathematics, history, geography, sciences (physics and chemistry), philosophy and psychology. The diploma conferred is the Chung-chi Tot-nghiep truong Dai-Hoc Su-Pham ban De-nhi Cap (Certificate of graduation from the Faculty of Education, second cycle).

ii) Normal schools for the training of primary school teachers

a) For regular primary school teachers: Level required: Baccalauréat, first part (11 years' schooling). The duration of the course is two years. The certificate conferred is Chung-chi Tot-Nghiep truong Su-Pham (Certificate of graduation from the Elementary Teacher Training School);

b) For primary school teachers in the mountain region: The level required is Bang Tieu-Hoc (Certificate of Primary Studies) (5 years' schooling plus first two years of secondary education, first cycle). The duration of the course is two years.

The different teacher training schools and courses within the jurisdiction of the Office of Educational Affairs are listed below.

A. Teacher training schools

1. Saigon Normal School - established in 1955. This was once the National Normal School. In 1962, it was transformed into the Truong Su-Pham Saigon (Saigon Elementary Teacher Training School). It has an enrolment of 1,000 students.

2. Long An Normal School - established in 1956. This was formerly a centre for training community teachers. In 1965, it was transformed into the Truong Su-Pham Long An (Elementary Teacher Training School of Long An). It has an enrolment of 500 students.

3. Banmethuot Normal School - established in 1957 (for higherlanders). It takes 200 students.

4. Vinh Long Normal School - established in 1961. It takes 1,000 students.

Some teacher training courses were started in 1969 and temporarily placed under the control of provincial department heads of primary education. These were conducted in Hue, Mytho, and Long Xuyen in classrooms originally intended for primary classes. These were made permanent two-year schools in 1970.

B. Teacher training classes (first year) were started in 1970 in Nha Trang, Can Tho, Banmethuot, Dalat, Ba Xuyen, and Ph Uoc Thuy. These will become full normal schools in the course of time. A new section for holders of the Baccalauréat (first part) is expected to be started in Banmethuot.

All these teacher training schools and teacher training courses are created by a ministerial decree and are placed under the control of the Directorate of Educational Affairs, Training, and Adult Education, and financed by the national budget.

Public and private universities providing secondary teacher training in Faculties of Pedagogy are:

a) Public universities: University of Saigon, the University of Hue, and the University of Can Tho.

b) Private universities: University of Dalat (Catholic), University of Van Hanh (Buddhist), and University of Hoahao (Buddhist).

Admission and enrolment. Admission to teacher training schools requires passing a competitive entrance examination held every year, generally in the month of August. The

minimum level of qualification required of candidates is Baccalauréat (1st part) (11 years of studies). Candidates should be between 19 and 25 years of age at the time of this examination.

The competitive entrance examination is conducted in two phases. The first phase consists of a test administered as follows:

a) 120 test items on general education comprising national language, history-geography, civics, modern language (French or English), mathematics, physics and chemistry, natural sciences (level: from grade VI to grade XI) to be answered in 1 hour and 30 minutes.

b) After studying a given text in the national language with a minimum of 20 lines, answering a written question within 2 hours.

The second phase consists of a further test and an interview. The test has 120 test items on education and general education, to be answered in 1 hour. The interview lasts for 5 to 10 minutes. During the interview, the examiners check whether the candidate is physically fit and has the required personality and moral and intellectual standards.

The enrolment of student-teachers in 1967-1969 is given in Table 1.

Table 1. Enrolment of student-teachers

	Academic year	First Year		Second Year		Total	Observation
		Boys	Girls	Boys	Girls		
Teacher training schools							
Saigon	67-68	...	...	...	...	941	Boys leave
	68-69	229	313	207	258	1 007	school because
	69-70	247	266	127	288	928	of mobilization
Vinh-Long	67-68	...	...	...	...	833	
	68-69	257	305	185	216	962	
	69-70	266	274	151	302	993	
Qui-Nhon	67-68	...	...	...	...	817	
	68-69	196	287	194	213	890	
	69-70	261	266	181	281	989	
Long-An	67-68	...	...	...	...	391	
	68-69	97	125	92	100	414	
	69-70	122	117	82	126	447	
Ban-Me Thuot	67-68	...	...	...	...	96	
	68-69	71	32	38	9	150	
	69-70	80	24	65	27	196	
Teacher training courses							
My-Tho	69-70	54	42	-	-	96	Established in 1969
Long-Xuyen	69-70	52	48	-	-	100	
Hue	69-70	84	71	-	-	155	

Student aid. All student-teachers are admitted to teacher training schools without paying tuition fees. Two-thirds of them also get a monthly scholarship. In return, they have to teach for 10 years after the school-leaving examination; if not, they have to refund the sum received for the two years of studies to the Government.

Curriculum. The curriculum of teacher training consists of :

A. General education: Vietnamese (grammar, philology, literature), French or English, economics, politics or social and international relations, art, music, practical work, audio-visual (learning how to make teaching materials or how to use audio-visual materials), physical education and youth activities, health and first-aid practice, practical work in science, physics and chemistry, needlework and child care (for girls) and woodwork (for boys), agriculture.

B. Professional education (theory): Objectives and philosophy of education (general methodology, techniques and methods of education, special education for the study of the different subjects); educational problems (the role of parents and family education, juvenile delinquency, unemployment, guidance of children, in the family, in the school and in society, the systems of education in some countries in Asia); child psychology (growth and development of the child - individual differences, the characteristics of each age, how to understand the child, the methods of evaluation); community education, professional ethics and public relations; principles of administration, organization and supervision of primary schools.

C. Student teaching - practice activities in teaching. In the first year, student-teachers assist in demonstration classes given by experienced teachers at the laboratory school. Comments on the observations are made. In the second year, they assist in turn in giving demonstration lessons (four weeks); then they teach under the guidance of professors of education and model teachers of the laboratory school. After each class, comments are given.

D. Co-curricular activities, community activities and youth activities.

The daily schedule of subjects for the two-year course after the Baccalauréat (First Part) from 1967-68 is as follows :

Subject	First year	Second year
1. Professional ethics	1	-
2. Public relations	-	1
3. Economics, politics	-	2
4. Community education	4	4
5. Education (theory)	4	-
6. Practice of education (student teaching)		
a) Assistance	2	-
b) Practice	-	8
7. Educational psychology	2	-
8. School administration - supervision	-	2
9. Educational problems	-	2
10. National language	2	2
11. Modern languages (French or English)	2	2
12. Agriculture	2	-
13. Sciences (mathematics, physics and chemistry)	2	-
14. Music	-	2
15. Art	2	2
16. For girls : needlework and child care) For boys : woodworking)	1	-
17. Practical work	2	-
18. Audio-visual aids	-	2
19. Health and first aid	1	-
20. Physical education	2	2
21. Youth activities	1	1
Total	30 *	32 hours

* Modern language (French or English) is an optional subject.

The teacher training curriculum is the same for all teacher training schools in which the level required of teachers is Baccalauréat 1+2 years of studies (9 months in a year), except for the teacher training school of Banmethuot, in the mountain

region, where the level required is lower - 7 years of studies plus two years of teacher training studies. In the section of primary teachers - special denomination, they follow the same curriculum in a reduced form.

Every year during the long vacation, the curriculum may be reviewed at a meeting of all teacher educators with the personnel of the Office of Educational Affairs. Teachers who teach the same subjects form sub-committees, analyse the curriculum, discuss it, and propose modifications and changes, when necessary, by questionnaires. The curriculum as reviewed and modified must be ratified by the Ministry of Education before being put into use. The curriculum of each subject contains special objectives. For the teaching of theory courses and practice courses most teachers make use of the "active method" which requires that the student-teachers put into actual practice their observations, their research on documents (upon the recommendation of the teacher), their reports, their statements in class, their self-evaluation and their discussions (in which all student-teachers participate followed by final advice from the teacher). This method introduces them to practice teaching in the second year.

Student teaching. Each class is divided into three groups with 13 to 14 student-teachers in a group; they elect the leaders of the group who are accepted by the professor of education (theory and practice) to be in charge of supervision. They must attend the classes taken by their colleagues and classes handled by model teachers and take notes in order to be able to put forward their comments. They help model teachers and their colleagues in maintaining discipline and order among the primary school pupils.

Thrice a month, student-teachers must do practice teaching. The professor of education gives a note for this. The grades for practice teaching are included in the grades for semestral composition.

Only student-teachers of the 2nd-year class do practice teaching. At the end of the 2nd semester, the professor of

education may name the brightest student-teacher to give demonstration lessons in place of model teachers.

Each teacher training institution has a laboratory school attached to it. In view of the increase in enrolment in teacher training schools, the Truong Su-Pham Saigon has to call on the co-operation of 6 other primary schools (co-operating schools) where student-teachers can go by private transportation for practice teaching. Practice teaching is under the control of an education professor (in general: 40 students per teacher) of the teacher training school and of the model teachers of the laboratory school.

Student-teachers must undergo practice teaching by rotation (three times a, b, c) (a = 8:00, b = 8:30, c = 2:30) and by distribution of classes (Grades I, II, III, IV, V). They fulfil the requirement on completion of 10 rounds of practice teaching in a year.

Every week, a supervisory group is organized by the professor of education to check if the student-teacher is translating theory into practice in accordance with the advice and recommendations of the professor. If he is undertaking research on the making of teaching materials, or if he is preparing lesson plans, he must submit them to the professor and to the model teacher.

During training, the practical experiences required from student-teachers are the following:

- How to supervise a class (to maintain order, award and punish pupils);
- How to follow a model teacher (to observe his gestures, his speech, his ability to keep promises, to give living examples to the pupils);
- How to organize academic activities;
- How to guide pupils to participate in class and to be happy in an atmosphere of discipline;
- How to maintain good relations with the principal, the supervisor, the parents and the pupils, the members of the community and the rural population;

- How to profit from practical experiences in the teacher training school in order to receive the Certificate of Graduation from the Elementary Teacher Training School in the final competitive examination.

Evaluation. Student-teachers (1st and 2nd years) must pass two semestral compositions in all the subjects included in the curriculum.

At the end of the 2nd year, the student-teacher (second year) must pass a school-leaving examination. This examination consists of two parts: an examination on practice teaching in which student-teachers must give two practice lessons, and a written examination. The latter consists of an essay on the problems of education, homework on community education, and homework of 120 tests on general education (national language, school administration and supervision, social relations, politics, economics, and foreign language). Second-year candidates with an average grade in practice and theory of 10/20 are considered as successful.

The semestral compositions and school-leaving examination are conducted by the teacher training school, but the topics for the school-leaving examination are prepared and given by the Office of Educational Affairs.

Practice teaching is evaluated in accordance with the rules and regulations laid down by education professors. These take into account the attitudes of student-teachers, the lesson plans prepared, ability shown in improvisation and utilization of aids and other materials, blackboard work,etc. and the student-teachers' voice, tone, manner of maintaining order, and rewarding and punishing pupils.

The scale of the grades given to student-teachers helps to decide who are very good, good, fair, average, weak and very weak. The last category are eliminated.

Successful candidates are entitled to a classification based on merit on receiving the Certificate of Graduation from the Elementary Teacher Training School. Classification is

carried out by adding the average of the grades on the four semestral compositions (1st and 2nd years), conduct, attendance, practice teaching (during the two years), academic activity, and homework and monthly lessons for two years. Those who are ranked higher may be recruited to a good post (provincial level).

Teacher educators

Teachers of primary teacher training institutions must be teachers of the second cycle (Tu Tai II - four years of studies at the Truong Bai Hoc Su-Pham), teachers who have followed teacher training courses (teachers of the 2nd cycle of secondary education, having completed two years of education and teacher training courses for one year), or teachers of the 1st cycle of secondary education (Tu Tai II - two years of studies at the Truong Dai Hoc Su-Pham) and who are well-qualified to teach a particular subject.

Holders of Licentiate of Letters (four years of university studies with four certificates) and Licentiate of Science (four years of university studies with 7 certificates forming one group) need no further qualification.

To upgrade and update the qualifications of teacher educators, a training course for teacher educators was launched in 1967. The level required for admission is that of professor of the second cycle who have completed at least two years of teaching, or alumni of primary teacher training institutions who are holders or licenses of letters or of sciences. The duration of the course is one year. The second training course opened in October 1969.

In-service education

Each teacher training school also maintains at the same time an in-service training centre (regional level). For example, the Truong Su-Pham Saigon trains teachers in the 10 provinces of the East. Primary teachers of these 10 provinces may undergo a month of training at the Truong Su-Pham Saigon during the long vacations.

In addition, there is a permanent in-service training centre (national level) for all the teachers of the country. Every year, there are around seven training courses. This permanent training centre organizes seminars for the provincial heads of primary education and for primary supervisors. During the month of training, participants pay particular attention to the improvement of their teaching competencies. They are given the opportunity to observe some community and industrial centres in order to broaden their knowledge. After a month at the training centre they are awarded a certificate that entitles them to promotion and an increase in salary, with the possibility of assuming the post of principal of primary schools.

Research

Research is now limited to the following agencies:

a) Directorate of Educational Planning and Legislation in the Ministry of Education;

b) Office of Educational Studies in the Directorate of Educational Affairs, In-Service Training and Adult Education.

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